

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

|   |  |  |  |  |  |
|---|--|--|--|--|--|
| DIVISION OF OIL, GAS AND MINING   |  |  |  | 5. LEASE DESIGNATION AND SERIAL NO.<br><b>ML-33225</b>                                     |  |
| APPLICATION FOR PERMIT TO DRILL, DEEPEN   |  |  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME<br><b>N/A</b>   |  |
| 1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>  |  |  |  | 7. UNIT AGREEMENT NAME<br><b>N/A</b>   |  |
| 1b. TYPE OF WELL  |  |  |  | 8. FARM OR LEASE NAME<br><b>N/A</b>  |  |
| OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>  |  |  |  | 9. WELL NO.<br><b>Horseshoe Bend State #12-36-6-21</b>                                     |  |
| 2. NAME OF OPERATOR<br><b>Newfield Production Company</b>   |  |  |  | 10. FIELD AND POOL OR WILDCAT<br><b>Horseshoe Bend</b>                                     |  |
| 3. ADDRESS AND TELEPHONE NUMBER:<br><b>Route #3 Box 3630, Myton, UT 84052 Phone: (435) 646-3721</b>   |  |  |  | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br><b>Lot #7 NW/SW Sec. 36, T6S, R21E</b> |  |
| 4. LOCATION OF WELL (FOOTAGE)<br>At Surface <b>Lot #7 NW/SW 1496' FSL 1261' FWL</b><br>At proposed Producing Zone <b>626860 X 40.252663</b><br><b>4456658 Y -109.508377</b>   |  |  |  | 12. County<br><b>Uintah</b>  |  |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*<br><b>Approximately 19.7 miles southwest of Vernal, UT</b>  |  |  |  | 13. STATE<br><b>UT</b>   |  |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)<br><b>Approx. 1261' f/lse line and NA' f/unit line</b>  |  | 16. NO. OF ACRES IN LEASE<br><b>450.10</b> |  | 17. NO. OF ACRES ASSIGNED TO THIS WELL<br><b>Approx. 40</b>                                |  |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.<br><b>Approx. 4156'</b>  |  | 19. PROPOSED DEPTH<br><b>3800'</b>         |  | 20. ROTARY OR CABLE TOOLS<br><b>Rotary</b>   |  |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br><b>4771' GL</b>   |  |  |  | 22. APPROX. DATE WORK WILL START*<br><b>3rd Quarter 2006</b>                               |  |
| 23. PROPOSED CASING AND CEMENTING PROGRAM   |  |  |  |  |  |
| SIZE OF HOLE  |  | SIZE OF CASING                             |  | WEIGHT/FOOT  |  |
| 12 1/4  |  | 8 5/8                                      |  | 24#  |  |
| 7 7/8   |  | 5 1/2                                      |  | 15.5#  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
| DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give date on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. |  |  |  |  |  |
| *The actual cement volumes will be calculated off of the open hole logs, plus 15% excess:   |  |  |  |  |  |
| SURFACE PIPE - 155 sx Class G Cement +/- 10%, w/ 2% CaCl2 & 1/4#/sk Cello-flake<br>Weight: 15.8 PPG YIELD: 1.17 Cu Ft/sk H2O Req: 5 gal/sk  |  |  |  |  |  |
| LONG STRING - 275 sacks lead to Mandy<br>Lead: Premium Lite II Cement + 3lbs/sk BA-90 + 3% KCl + .25 lbs/sk Cello Flake + 2 lbs/sk Kol Seal +<br>10% Bentonite + .5% Sodium Metasilicate<br>Weight: 11.0 PPG YIELD: 3.43 Cu Ft/sk H2O Req: 21.04 gal/sk   |  |  |  |  |  |
| 450 sack tail<br>Tail: 50-50 Poz-Class G Cement + 3% KCl + .25 lbs/sk Cello Flake + 2% Bentonite + .3% Sodium Metasilicate<br>Weight: 14.2 PPG YIELD: 1.59 Cu Ft/sk H2O Req: 7.88 gal/sk  |  |  |  |  |  |
| 24. Name & Signature <u>Mandie Crozier</u> Title: <u>Regulatory Specialist</u> Date: <u>7/13/2006</u>   |  |  |  |  |  |

(This space for State use only)

API Number Assigned:

APPROVAL:

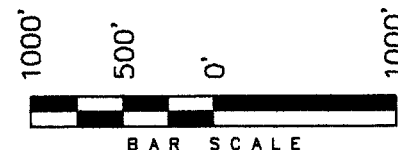
**RECEIVED**

**JUL 14 2006**

DIV. OF OIL, GAS & MINING

N89°50'W - 40.26 (G.L.O.)      S88°45'W - 38.02 (G.L.O.)  
2657.65' (Measured)  
50'W G.L.O. (Basis of Bearings)      S88°42'05"W - 2509.38' (Meas.)

WELL LOCATION, 12-36-6-21, LOCATED  
AS SHOWN IN LOT 7 OF SECTION 36,  
T6S, R21E, S.L.B.&M. UINTAH COUNTY,  
UTAH.



THIS IS TO CERTIFY THAT THE ABOVE LIST WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEY  
MADE BY ME OR UNDER MY SUPERVISION AND  
THE SAME ARE TRUE AND CORRECT TO THE BEST  
OF MY KNOWLEDGE AND BELIEF. No. 189377

*Stacy W. Stewart*  
STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (BRENNAN BASIN)

12-36-6-21  
(Surface Location) NAD 83  
LATITUDE = 40° 15' 09.47"  
LONGITUDE = 109° 30' 32.59"

**TRI STATE LAND SURVEYING & CONSULTING**  
180 NORTH VERNAL AVE. — VERNAL, UTAH 84078  
(435) 781-2501

|                             |                   |
|-----------------------------|-------------------|
| DATE SURVEYED:<br>3-3-06    | SURVEYED BY: C.M. |
| DATE DRAWN:<br>3-10-06      | DRAWN BY: M.W.    |
| REVISED:<br>06-13-06 F.T.M. | SCALE: 1" = 1000' |

NEWFIELD PRODUCTION COMPANY  
HORSESHOE BEND STATE #12-36-6-21  
LOT #7 SECTION 36, T6S, R21E  
UINTAH COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

|             |         |
|-------------|---------|
| Uinta       | Surface |
| Green River | 3800'   |

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 3800' – Gas

4. **PROPOSED CASING PROGRAM:**

Surface Casing: 8-5/8" J-55 24# w/ST&C collars; set at 290' (New)

Production Casing: 5-1/2" J-55, 15.5# w/LT&C collars; set at TD (New or used, inspected).

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

The well will be drilled with fresh water/polymer system to TD. If necessary, to control formation fluids, the system will be weighted with the addition of bentonite gel, and if conditions warrant, barite. This fresh water system typically will contain Total Dissolved Solids (TDS) of less than 3000 PPM. Neither potassium chloride nor chromates will be utilized in the fluid system. The anticipated mud weight is 8.4 ppg and weighted as necessary for gas control.

Newfield Production Company requests that the spark arrest, exhaust, or water cooled exhaust be waived under the Special Drilling Operations of Onshore Order #2.

**MUD PROGRAM**

Surface – TD'

**MUD TYPE**

fresh water system

A fresh water system will be used in the drilling this well from surface to TD. Clay inhibition and hole stability will be achieved with a KCL substitute additive. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. No chromate additives will be used in the mud system.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 290' +/-, and a Compensated Neutron-Formation Density Log from TD to 3000' +/- . A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered; or that any other abnormal hazards such as H<sub>2</sub>S will be encountered in this area.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the third quarter of 2006, and take approximately seven (7) days from spud to rig release.



NEWFIELD PRODUCTION COMPANY  
HORSESHOE BEND STATE #12-36-6-21  
LOT #7 SECTION 36, T6S, R21E  
UINTAH COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. **EXISTING ROADS**

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site Horseshoe Bend State 12-36-6-21 located in the Lot #7 Section 36, T6S, R21E, S.L.B. & M., Uintah County, Utah:

Proceed southwesterly out of Vernal, Utah – 10.4 miles  $\pm$  to the junction of this road and an existing road to the southwest; proceed southwesterly – 2.5 miles  $\pm$  to it's junction with an existing road to the southwest; proceed along this road – 6.1 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly – 0.5 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed southerly along the proposed access road – 1,510' to the proposed well location.

In the above mentioned paragraph, the highways are bituminous surfaced roads, all other roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. **PLANNED ACCESS ROAD**

Approximately 1,510' of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing gas well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted Desert Tan. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Water for drilling and completion purposes will be obtained from one of the following sources. Refer to Exhibit "E" for a copy of the Water Use Authorization.

Owner: Target Trucking  
2960 North 500 East  
Vernal, Utah 84078  
(435) 789-6850

Owner: AC/DC Fence and Roustabout Company  
PO Box 1493  
Roosevelt, Utah 84066  
(435) 722-7673

Fresh water may also be purchased by Newfield Production from the Johnson Water District and trucked to the proposed location for the purpose of drilling. – **EXHIBIT D**.

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve

pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Water not meeting quality criteria will be disposed of at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from

the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

**The Archaeological Cultural Resource Survey will be forthcoming.**

**Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Horseshoe Bend State 12-36-6-21, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Horseshoe Bend State 12-36-6-21 Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Representative

Name: Shon McKinnon  
Address: Newfield Production Company  
Route 3, Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

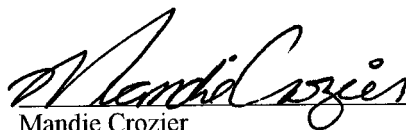
Certification

Please be advised that Newfield Production Company is considered to be the operator of well #12-36-6-21, Lot #7 Section 36, T6S, R21E, LEASE #ML-33225, Uintah County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4471291.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

Date

7/13/06



Mandie Crozier  
Regulatory Specialist  
Newfield Production Company



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Robert L. Morgan  
State Engineer

1594 West North Temple, Suite 220  
PO Box 146300  
Salt Lake City, Utah 84114-6300  
801-538-7240  
801-538-7467 (Fax)

August 11, 2000

Target Trucking 43-10988  
Dan McKee or R.C. Hacking  
3960 North 500 East  
Vernal, UT 84078

Dear Applicant:

RE: APPROVED APPLICATION  
NUMBER 43-10988 (F72511)

This is your authority to develop the water under the above referenced application which under Sections 73-3-10 and 73-3-12, Utah Code Annotated, 1953, as amended, must be diligently prosecuted to completion. The water must be put to beneficial use and proof of beneficial use be made to the State Engineer on or before August 31, 2003; otherwise, the application will be lapsed.

Proof of beneficial use is evidence to the State Engineer that the water has been placed to its full intended beneficial use. By law, it must be prepared by a registered engineer or land surveyor, who will certify to the location and the uses for the water. Your proof of beneficial use will become the basis for the extent of your water right.

Failure on your part to comply with the requirements of the statutes may result in forfeiture of this application. **It is the applicant's obligation to maintain a current address with this office. Please notify this office immediately of any change.**

Also enclosed are two post cards. You must give the Driller (Start) Card to the licensed driller with whom you contract to construct the well(s). The other card is the Applicant Card which is your responsibility to sign and return to this office immediately after final completion of the well. CAUTION: There may be local health department requirements for the actual siting of your well. Please check with the proper local authority before construction begins.

Your contact with this office, should you need it, is with the Vernal Regional Office. The telephone number is (435) 781-5327.

Sincerely,

Robert L. Morgan, P.E.  
State Engineer

RLM:et

Encl.: Memorandum Decision

Exhibit "E"  
1 of 3

Resolution No. 05- 05 - 209  
Uintah and Ouray Agency  
Fort Duchesne, UT

**WHEREAS,** the Ute Tribal Business Committee, has the right to approve or veto any sale, disposition, lease or encumbrance of Tribal Lands, interest in Tribal lands or other Tribal assets, which may be authorized or execute by officials or Agency of the Government, provides that no Tribal lands shall ever be encumbered or sold, except leases for mining purposes or on irrigable land may be made for such longer periods as may be authorized by law;

**WHEREAS,** Energy producers Reservation wide have a need for industrial water to drill oil and gas wells; and

**WHEREAS,** AC/DC Fence and Roustabout Company proposes to pump water out and to build French drains, if needed, from Reservation wide to supply industrial water to the energy producers for the purpose of drilling oil and gas wells; and

**WHEREAS,** Energy producers within the boundaries of the U & O reservation; have a need for industrial water to drill oil and gas wells. Also, to build French drains, as needed; and

**WHEREAS,** AC/DC Fencing and Roustabout Company, proposes to pay the Ute Indian Tribe a reasonable market value of five (.5) cents for each barrel of water sold to energy producers through their company, and twenty-five (.25) cents to AC/DC for a total of thirty (.30) cents per barrel,

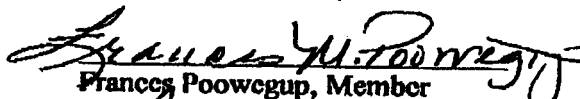
**NOW, THEREFORE, BE IT RESOLVED BY THE TRIBAL BUSINESS COMMITTEE OF THE UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION, UTAH,** in order to promote independent business among tribal members, and to foster the economic welfare of tribal members and to develop if needed Group VI water rights of the Ute Indian Tribe, the Ute Indian Tribe hereby grants authority to AC/DC Fence and Roustabout Company to develop resources Reservation wide for the purpose of energy development.

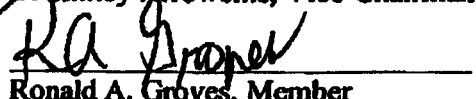
**BE IT FURTHER RESOLVED,** that AC/DC Fence and Roustabout pay a reasonable market value for all water sold through their company for a period of two (2) year.

  
M. Maxine Natchecs, Chairman

ABSENT

T. Smiley Arrowchis, Vice-Chairman

  
Frances Poowegup, Member

  
Ronald A. Groves, Member

  
Irene Cuch, Member

  
Richard Jenks Jr, Member

**CERTIFICATION**

I hereby certify that the foregoing Resolution was adopted by the Tribal Business Committee of the Ute Indian Tribe of the Uintah and Ouray Reservation, Utah, at a duly called meeting at Fort Duchesne, Utah, on the 13 day of July, 2005, at which time a quorum was present and voted 5 FOR, 0 AGAINST, 0 ABSTAINING, and 1 ABSENT.

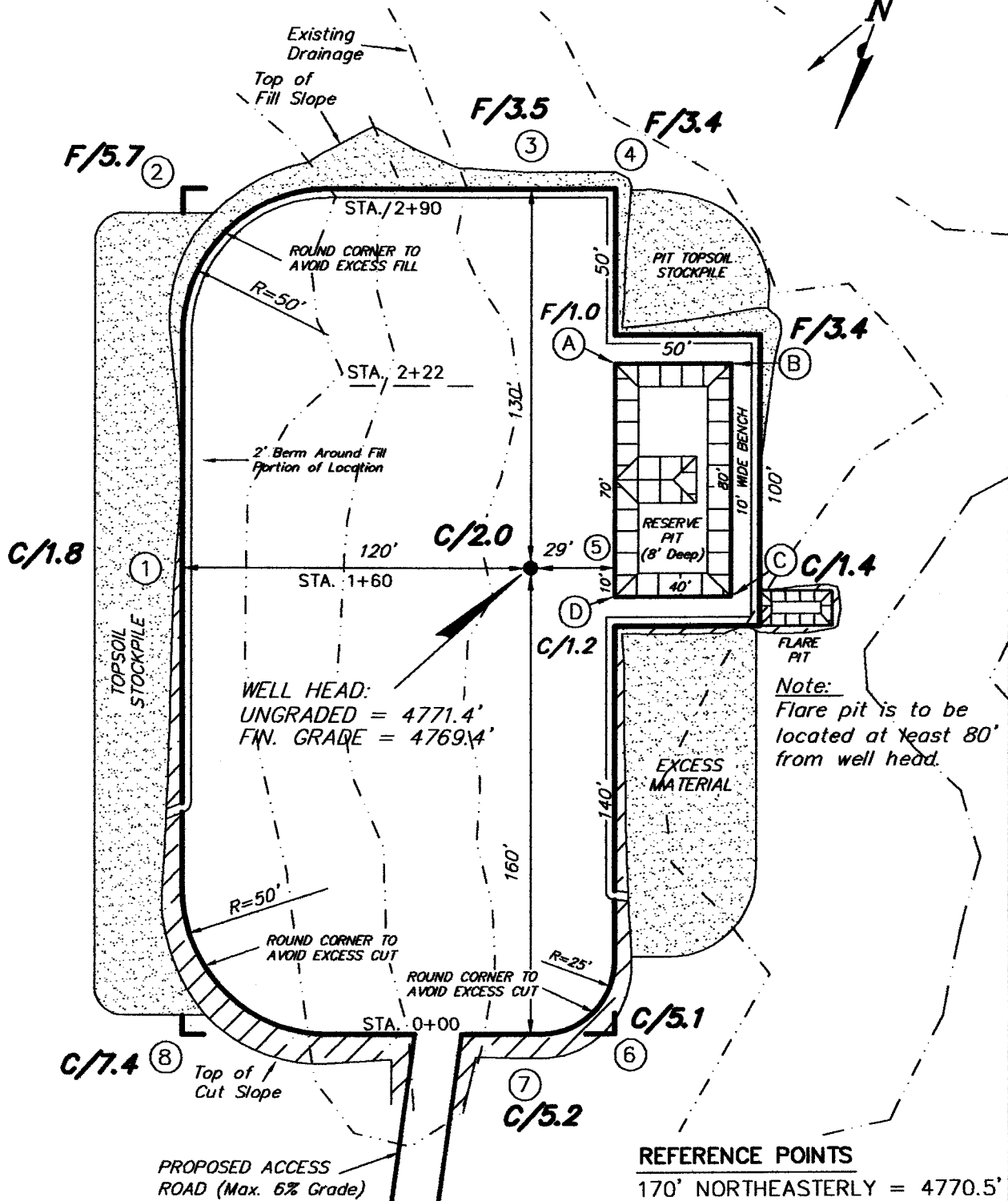
  
Secretary of the Tribal Business Committee



# NEWFIELD PRODUCTION COMPANY

12-36-6-21

Section 36, T6S, R21E, S.L.B.&M.



REVISED: 06-13-06 F.T.M. (Changed the Well Name)  
REVISED: 07-11-06 F.T.M. (Added the Flare Pit)

## REFERENCE POINTS

170' NORTHEASTERLY = 4770.5'  
220' NORTHEASTERLY = 4767.0'  
180' SOUTHEASTERLY = 4763.0'

SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: M.W.

DATE: 3-10-06

**Tri State**  
Land Surveying, Inc.

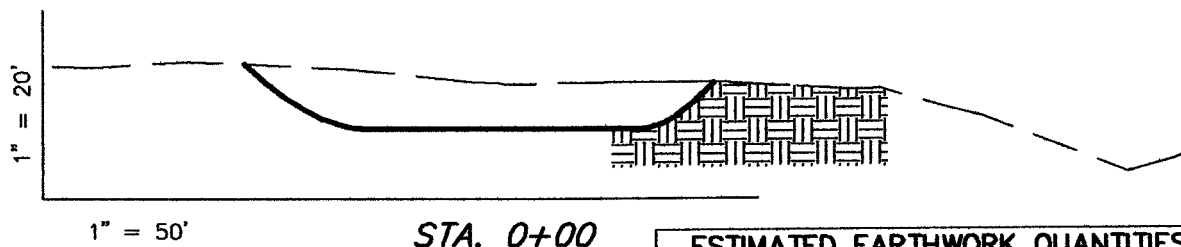
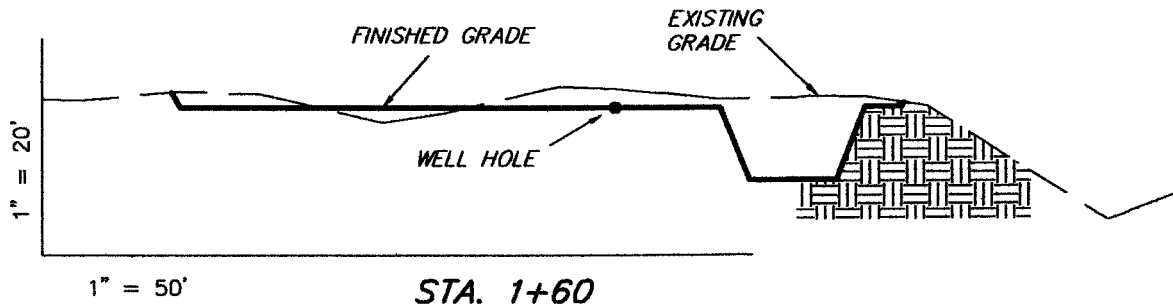
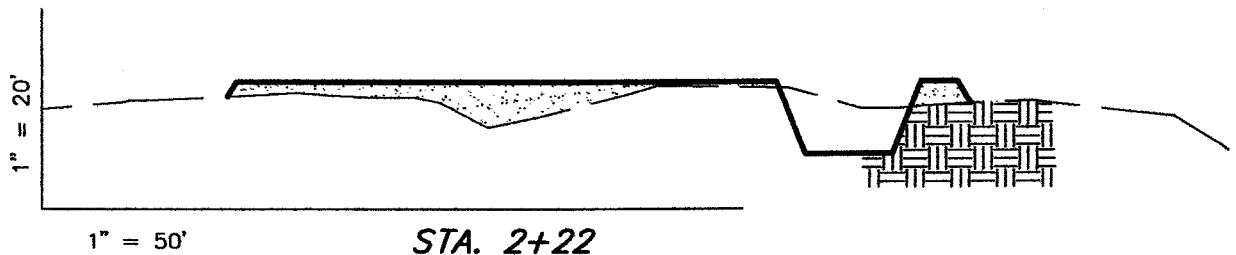
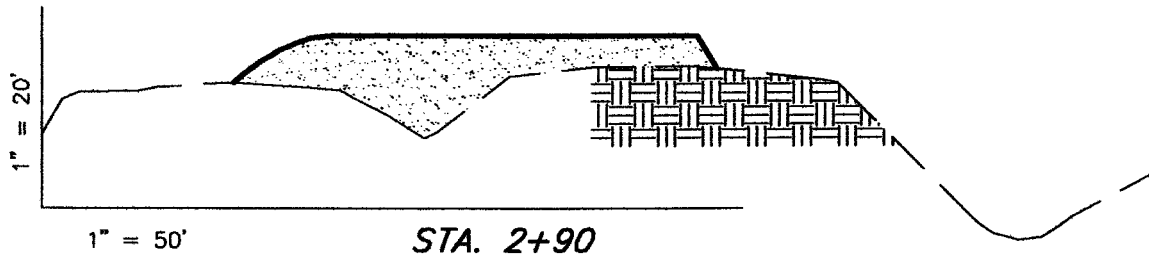
(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

12-36-6-21



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

REVISED: 06-13-06 F.T.M. (Changed the Well Name)

### ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

| ITEM   | CUT   | FILL  | 6" TOPSOIL                               | EXCESS |
|--------|-------|-------|--|--------|
| PAD    | 2,330 | 2,330 | Topsoil is<br>not included<br>in Pad Cut | 0      |
| PIT    | 640   | 0     |  | 640    |
| TOTALS | 2,970 | 2,330 | 970                                      | 640    |

SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: M.W.

DATE: 3-10-06

**Tri State**  
Land Surveying, Inc.

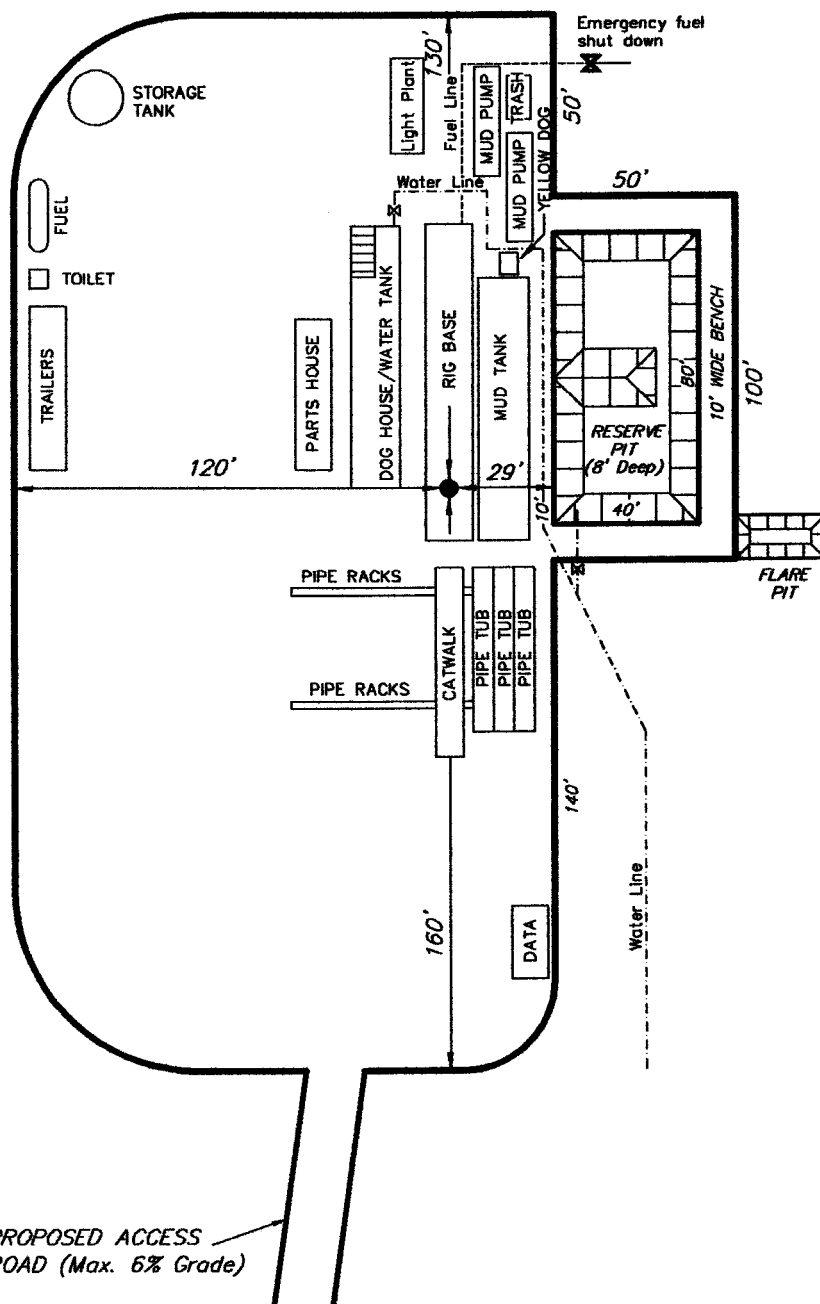
(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

12-36-6-21



REVISED: 06-13-06 F.T.M. (Changed the Well Name)  
 REVISED: 07-11-06 F.T.M. (Added the Flare Pit)

SURVEYED BY: C.M.

SCALE: 1" = 50'

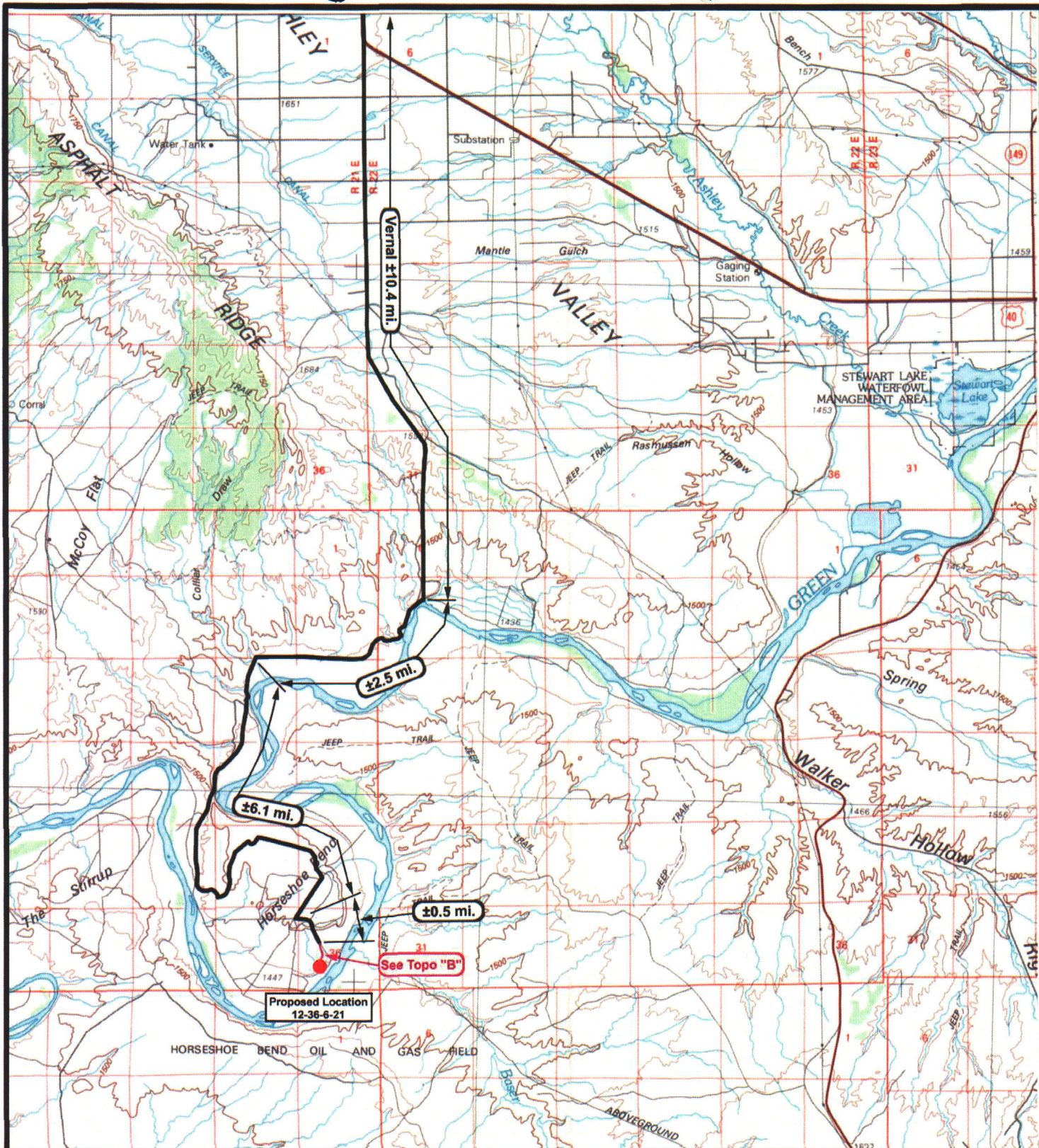
DRAWN BY: M.W.

DATE: 3-10-06

(435) 781-2501

**Tri State**  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078





**NEWFIELD**  
Exploration Company

**12-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**

**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

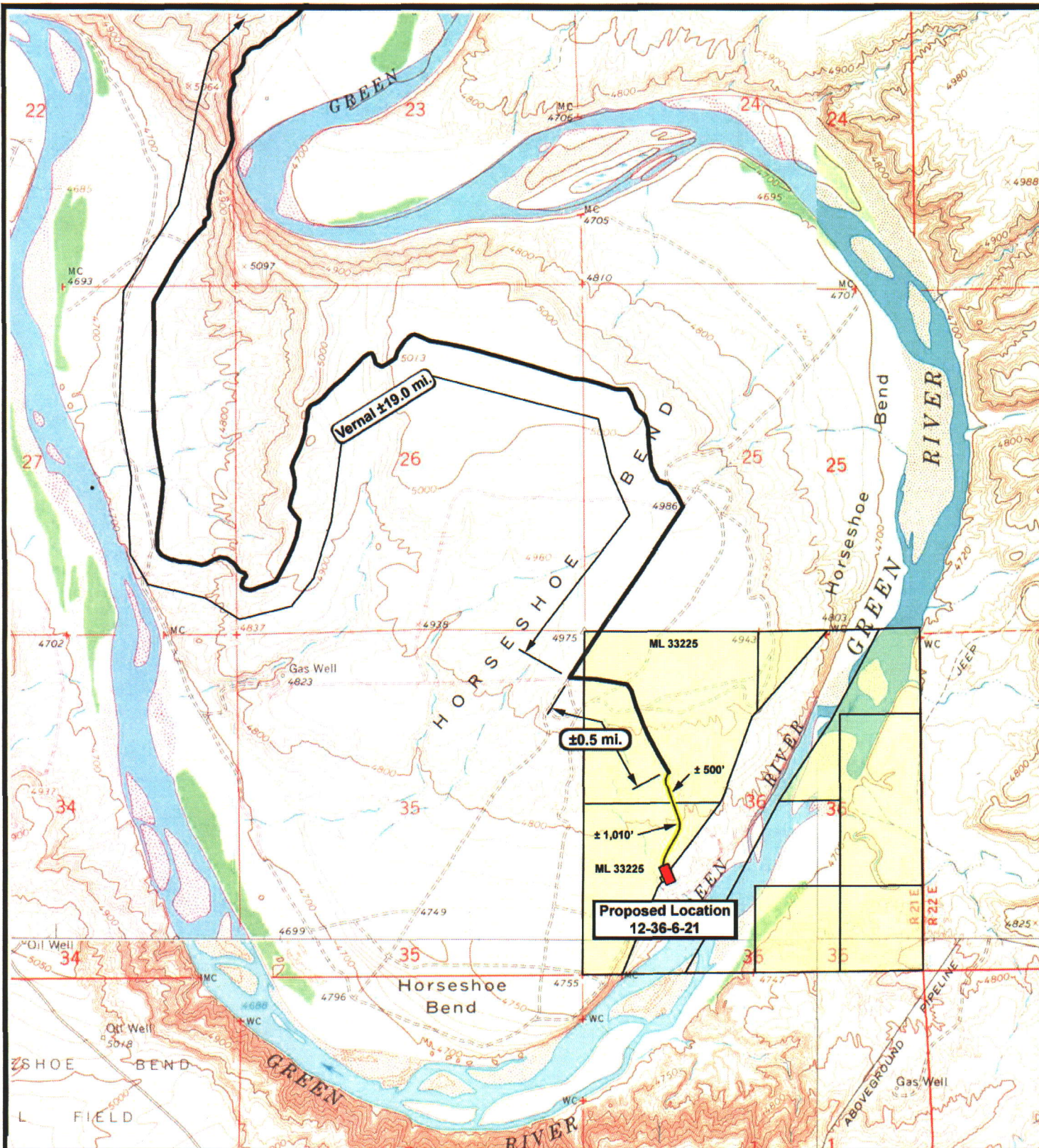
SCALE: 1 = 100,000  
DRAWN BY: mw  
DATE: 03-14-2006

**Legend**

Existing Road  
Proposed Access

TOPOGRAPHIC MAP  
**"A"**





**NEWFIELD**  
Exploration Company

**12-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501

180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'

DRAWN BY: mw

DATE: 03-14-2006

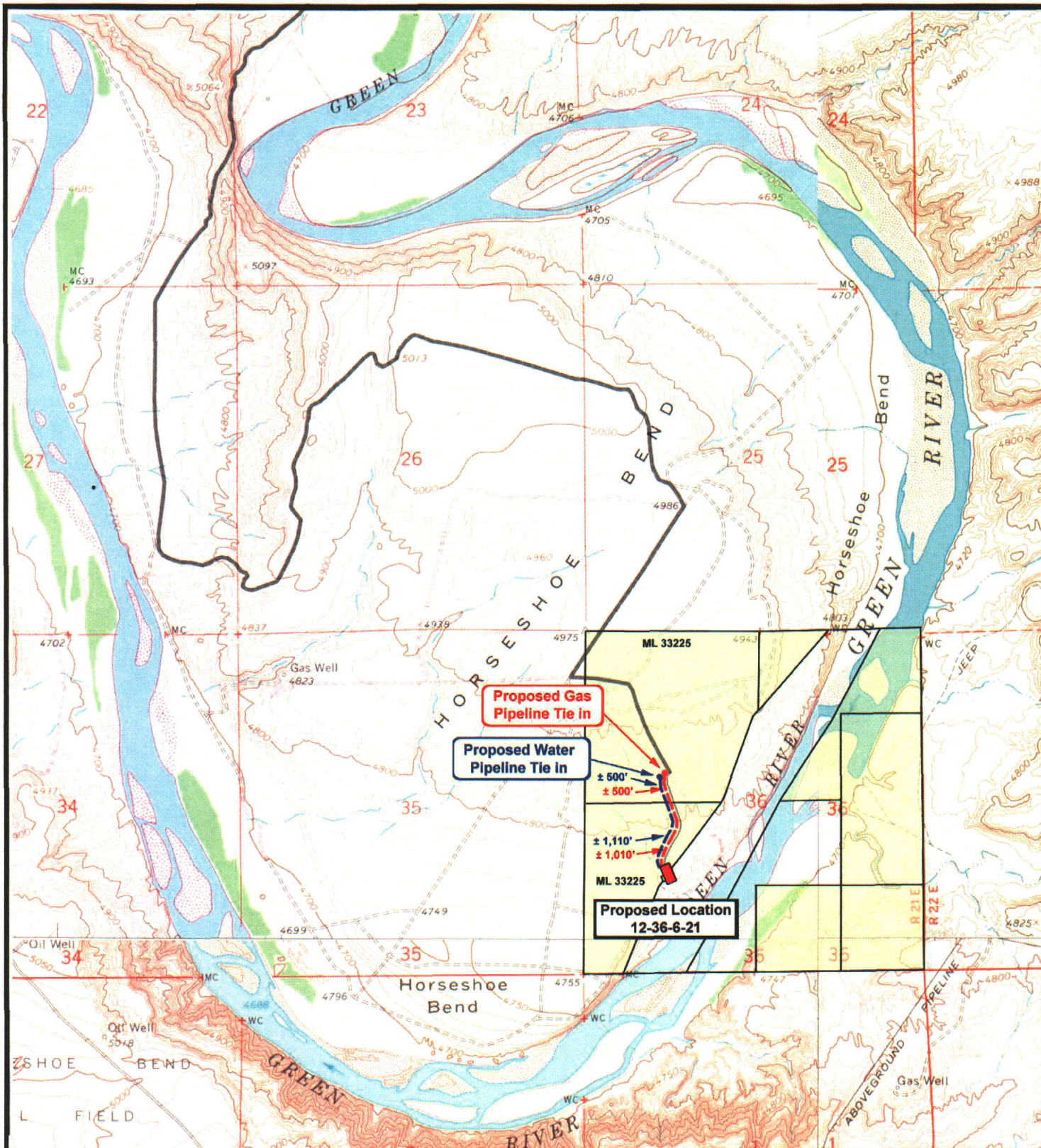
**Legend**

Existing Road  
 Proposed Access

TOPOGRAPHIC MAP

**"B"**





**NEWFIELD**  
Exploration Company

**12-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**

**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

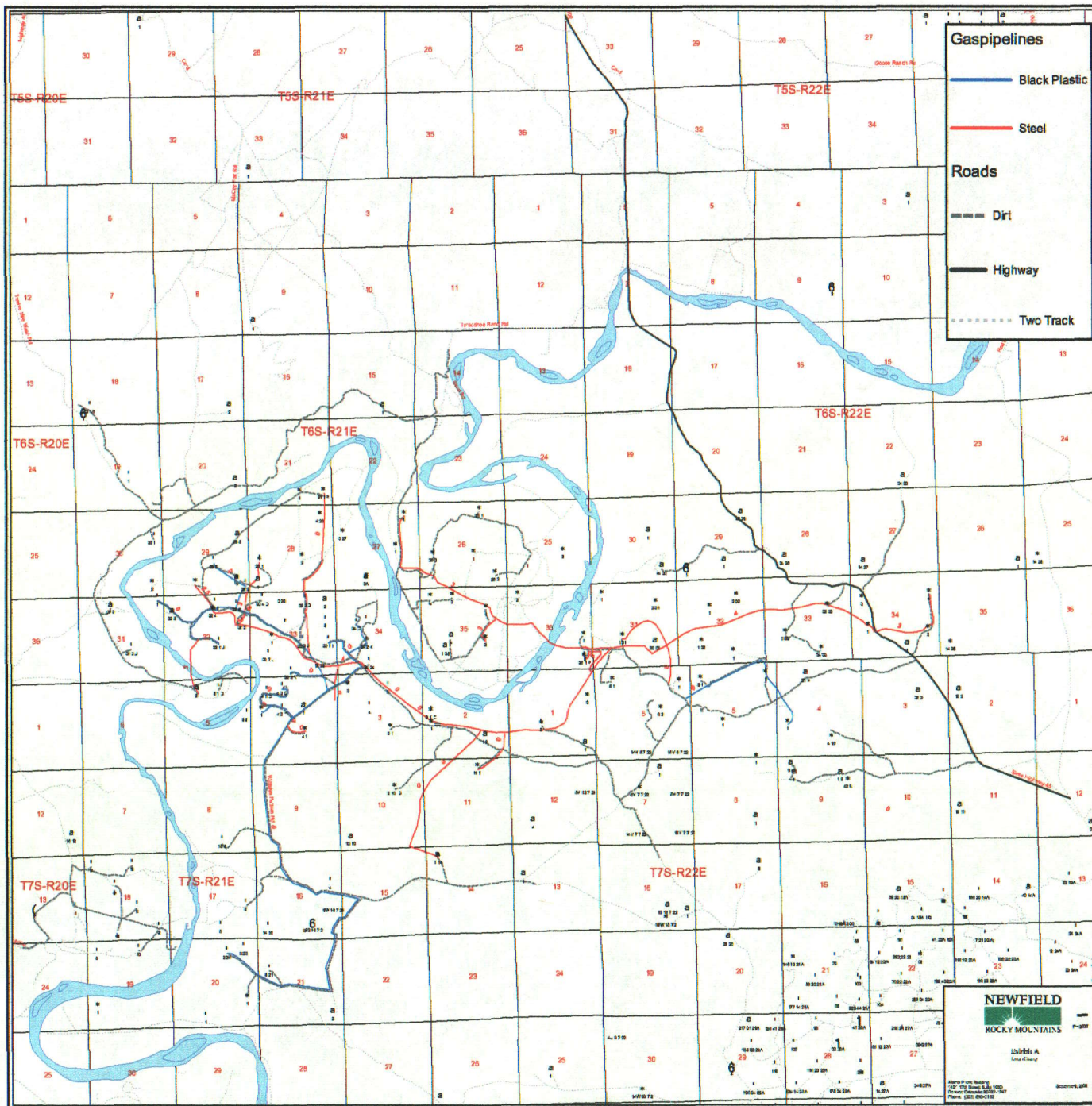
SCALE: 1" = 2,000'  
DRAWN BY: mW  
DATE: 06-13-2006

**Legend**

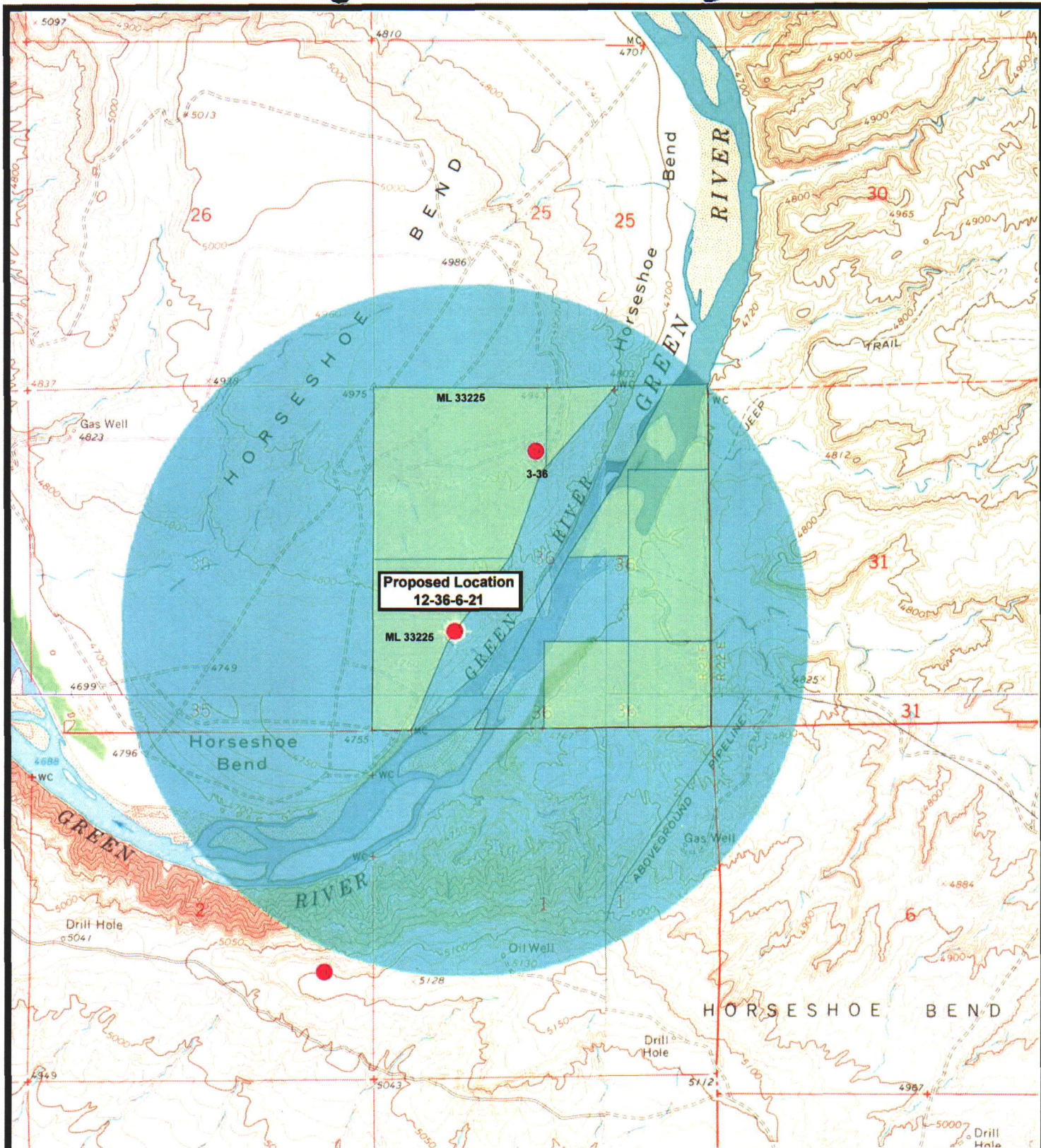
- Roads
- Proposed Gas Line
- Proposed Water Line

**TOPOGRAPHIC MAP**  
**"C"**









**NEWFIELD**  
Exploration Company

**12-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: mw  
DATE: 06-13-2006

**Legend**

- **Well Locations**
- **One-Mile Radius**

**Exhibit "B"**



## 2-M SYSTEM

Blowout Prevention Equipment Systems

2000 lb

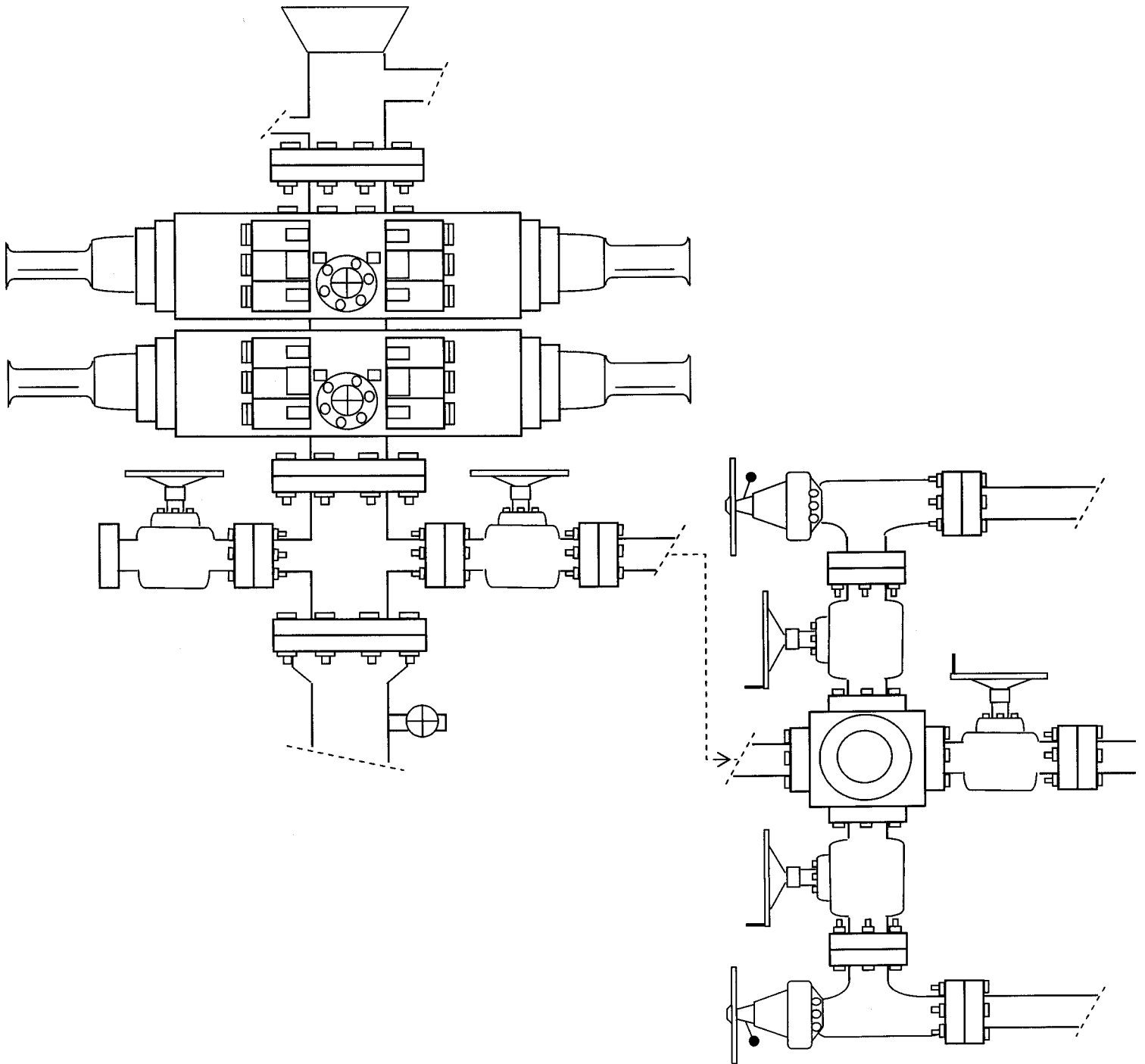


EXHIBIT C

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 07/14/2006

API NO. ASSIGNED: 43-047-38368

WELL NAME: HORSESHOE BEND ST 12-36-6-21  
OPERATOR: NEWFIELD PRODUCTION ( N2695 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

NWSW 36 060S 210E  
SURFACE: 1584 FSL 1342 FWL  
BOTTOM: 1584 FSL 1342 FWL  
COUNTY: UINTAH  
LATITUDE: 40.252900 LONGITUDE: -109.508093  
UTM SURF EASTINGS: 626883 NORTHINGS: 4456684  
FIELD NAME: HORSESHOE BEND ( 620 )

| INSPECT LOCATN BY: / / |            |                |
|------------------------|------------|----------------|
| Tech Review            | Initials   | Date           |
| Engineering            | <u>DKD</u> | <u>9/20/06</u> |
| Geology                |            |                |
| Surface                |            |                |

LEASE TYPE: 3 - State  
LEASE NUMBER: ML-33225  
SURFACE OWNER: 3 - State

PROPOSED FORMATION: GRRV  
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. B001834 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-10988 )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

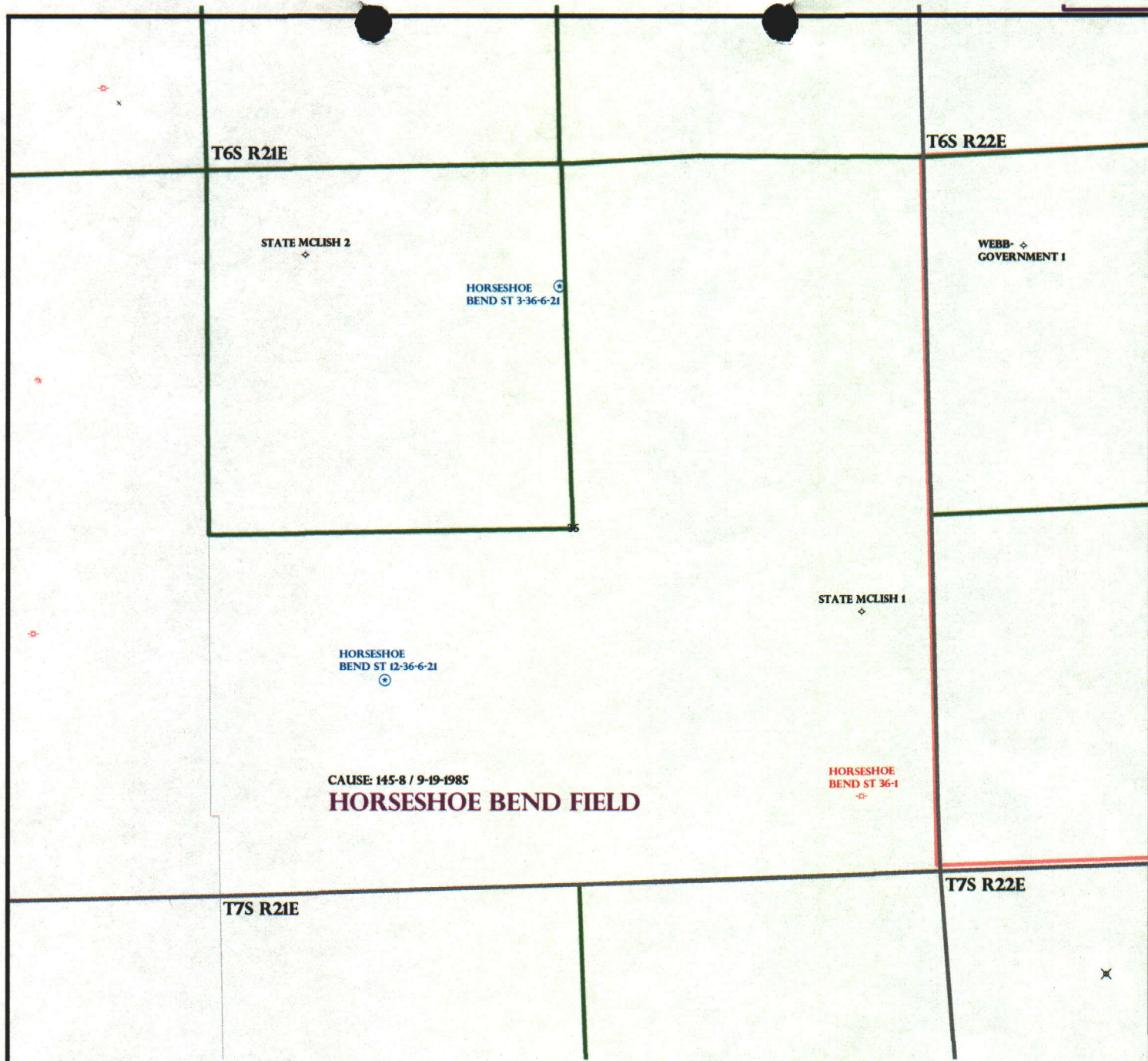
     R649-2-3.  
Unit: \_\_\_\_\_  
     R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
     R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 145-8  
Eff Date: 9-19-85  
Siting: 500' fr 1/4 boundary Section  
     R649-3-11. Directional Drill

COMMENTS:

Needs Pres. (08-15-86)

STIPULATIONS:

1- STATEMENT OF BASIS  
2- Surface Csg Cont Stip



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 36 T.6S R. 21E

FIELD: HORSESHOE BEND (620)

COUNTY: UINTAH

CAUSE: 145-8 / 9-19-1985

#### Field Status

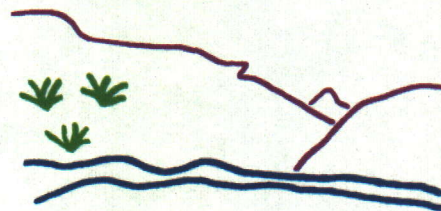
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

#### Unit Status

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

#### Wells Status

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 26-JULY-2006



**DIVISION OF OIL, GAS AND MINING**  
**APPLICATION FOR PERMIT TO DRILL**  
**STATEMENT OF BASIS**

OPERATOR: NEWFIELD PRODUCTION COMPANY  
WELL NAME & NUMBER: HORSESHOE BEND STATE 12-36-6-21  
API NUMBER: 43-047-38368  
LOCATION: 1/4, 1/4 NW/SW Sec: 36 TWP: 6S RNG: 21E 1496' FSL 1261' FWL

**Geology/Ground Water:**

Newfield proposes to set 290 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 2,200 feet. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 36. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters up hole. The proposed casing and cementing program should adequately protect any near surface aquifers.

Reviewer: Brad Hill Date: 08-24-06

**Surface:**

The pre-site investigation of the surface was performed on 08/15/2006. This site is on State surface, with State minerals. DWR representative, Ben Williams was invited, but was unable to attend the pre-site. Mr. Williams expressed his regrets at being unable to attend, and stated that he had no recommendations to make for this site. SITLA representative Jim Davis was present and expressed concern with the view of this location from the Green River. After consultation with LaVonne Garrison, Mr. Davis requested that a dirt berm be built to block the view of location tanks and other equipment from the river. Mr. Davis also requested "Carlsbad Canyon" as the tank paint color to best blend into the natural surroundings.

The location of the reserve pit as staked is unacceptable. It is staked very near a deep drainage, which slopes steeply to the Green river approximately 200 yards away. Mr. McKinnon agreed to have the well re-staked and then inform Richard Powell of DOGM so that an additional site visit could be arranged. It was agreed that the location would need to make a quarter turn clockwise as viewed from above.

Reviewer: Richard Powell Date: 08/15/2006

**Conditions of Approval/Application for Permit to Drill:**

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

**OPERATOR:** NEWFIELD PRODUCTION COMPANY  
**WELL NAME & NUMBER:** HORSESHOE BEND STATE 12-36-6-21  
**API NUMBER:** 43-047-38368  
**LEASE:** ML-33225 **FIELD/UNIT:** HORSESHOE BEND  
**LOCATION:** 1/4, 1/4 NW/SW Sec: 36 TWP: 6S RNG: 21E 1496' FSL 1261' FWL  
**LEGAL WELL SITING:** 500' F 1/4 boundary.  
**GPS COORD (UTM):** 4456660Y 0626862X **SURFACE OWNER:** SITLA

**PARTICIPANTS**

Richard Powell (DOGM), Shon McKinnon and Kim Kettle (Newfield), Jim Davis (SITLA).

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Location is set near the southern edge of large bench, which drains steeply to the south to the Green River approximately 200 yards away. This bench is an extension of a large plateau, which is nearly surrounded by a large loop of the Green River. On the east and west sides of the location are drainage cuts, which drop steeply to the river. The cut on the west is much deeper and more pronounced than that on the east.

**SURFACE USE PLAN**

**CURRENT SURFACE USE:** Wildlife grazing.

**PROPOSED SURFACE DISTURBANCE:** Location will be 290' by 199'. Proposed new access road approximately 1,510 ft.

**LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS:** See attached map from GIS database.

**LOCATION OF PRODUCTION FACILITIES AND PIPELINES:** All production facilities will be on location and added after drilling well.

**SOURCE OF CONSTRUCTION MATERIAL:** All construction material will be borrowed from site during construction of location.

**ANCILLARY FACILITIES:** None will be required.

**WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN):** This location is visible from the Green River. Jim Davis, after consultation with LaVonne Garrison, has requested that a dirt berm be built to hide the tank battery and other equipment from river travelers.

**WASTE MANAGEMENT PLAN:**

Drilled cuttings will be settled into reserve pit. Liquids from pit will

be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and regulated by the appropriate health authority. Trash will be contained in trash baskets and disposed of at an approved landfill.

#### **ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Sagebrush, shad scale, rabbit brush, prickly pear / Rodents, Raptors, Coyote, Songbirds, Rabbit, Red fox, Pronghorn, mule deer.

SOIL TYPE AND CHARACTERISTICS: Light brown sandy clay soil covered with small rocks.

EROSION/SEDIMENTATION/STABILITY: Very little natural erosion. Sedimentation and stability are not a problem and location construction shouldn't cause an increase in stability or erosion problems.

PALEONTOLOGICAL POTENTIAL: None observed.

#### **RESERVE PIT**

CHARACTERISTICS: 80' BY 40' and eight feet deep.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 22.

#### **SURFACE RESTORATION/RECLAMATION PLAN:**

SURFACE AGREEMENT: As per SITLA

CULTURAL RESOURCES/ARCHAEOLOGY: According to Mr. McKinnon the archaeology study has been ordered.

#### **OTHER OBSERVATIONS/COMMENTS**

The reserve pit is staked next to a fairly deep drainage in such a manner that any breach or leak from the pit could quickly drain to the Green river. As a result, I informed Shon McKinnon that the well must be re-staked so that the location would be between the river and the pit and so that the pit would be moved away from the drainage on the west side of the location. This can be accomplished by rotating the location a quarter turn clockwise. Mr. McKinnon agreed to have it re-staked and inform me so that another site visit can be arranged.

#### **ATTACHMENTS**

Photos of this site were taken and placed on file.

RICHARD POWELL  
DOGM REPRESENTATIVE

08/15/06 1:15 AM  
DATE/TIME

**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

| <u>Site-Specific Factors</u>                            | <u>Ranking</u> | <u>Site Ranking</u> |
|---|----------------|---------------------|
| Distance to Groundwater (feet)                          |                |                     |
| >200  | 0              |                     |
| 100 to 200  | 5              |                     |
| 75 to 100   | 10             |                     |
| 25 to 75  | 15             |                     |
| <25 or recharge area                                    | 20             | <u>5</u>            |
| Distance to Surf. Water (feet)                          |                |                     |
| >1000   | 0              |                     |
| 300 to 1000   | 2              |                     |
| 200 to 300  | 10             |                     |
| 100 to 200  | 15             |                     |
| < 100   | 20             | <u>2</u>            |
| Distance to Nearest Municipal Well (feet)               |                |                     |
| >5280   | 0              |                     |
| 1320 to 5280  | 5              |                     |
| 500 to 1320   | 10             |                     |
| <500  | 20             | <u>0</u>            |
| Distance to Other Wells (feet)                          |                |                     |
| >1320   | 0              |                     |
| 300 to 1320   | 10             |                     |
| <300  | 20             | <u>0</u>            |
| Native Soil Type  |                |                     |
| Low permeability  | 0              |                     |
| Mod. permeability                                       | 10             |                     |
| High permeability                                       | 20             | <u>10</u>           |
| Fluid Type  |                |                     |
| Air/mist  | 0              |                     |
| Fresh Water   | 5              |                     |
| TDS >5000 and <10000                                    | 10             |                     |
| TDS >10000 or Oil Base Mud Fluid                        | 15             |                     |
| containing significant levels of hazardous constituents | 20             | <u>5</u>            |
| Drill Cuttings  |                |                     |
| Normal Rock   | 0              |                     |
| Salt or detrimental                                     | 10             | <u>0</u>            |
| Annual Precipitation (inches)                           |                |                     |
| <10   | 0              |                     |
| 10 to 20  | 5              |                     |
| >20   | 10             | <u>0</u>            |
| Affected Populations                                    |                |                     |
| <10   | 0              |                     |
| 10 to 30  | 6              |                     |
| 30 to 50  | 8              |                     |
| >50   | 10             | <u>0</u>            |
| Presence of Nearby Utility Conduits                     |                |                     |
| Not Present   | 0              |                     |
| Unknown   | 10             |                     |
| Present   | 15             | <u>0</u>            |

**Final Score**      22      (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

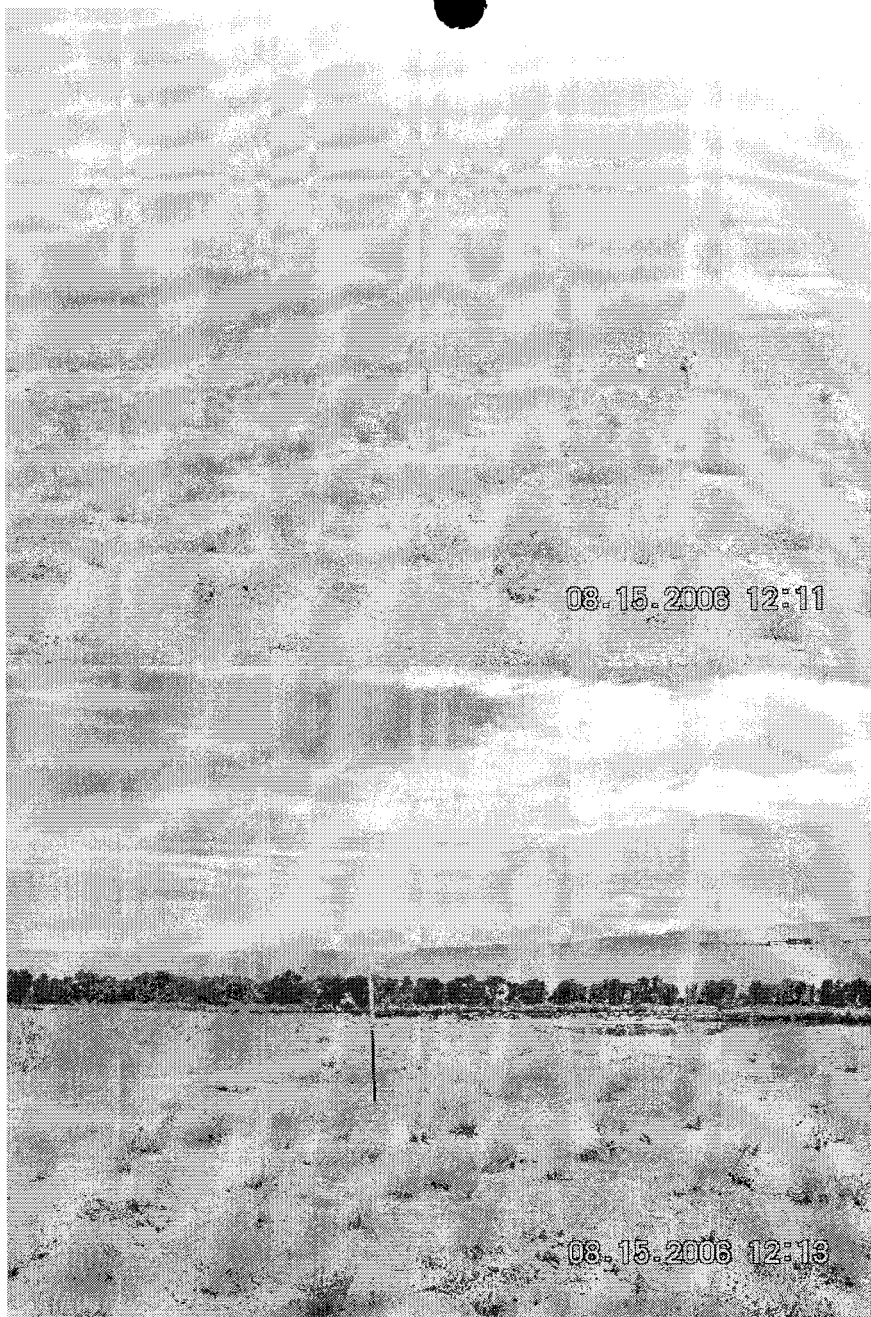
Sensitivity Level III = below 15; no specific lining is required.



08.15.2006 12:11

08.15.2006 12:10





08.15.2006 12:11

08.15.2006 12:13

Casing Schematic

Surface

8-5/8"  
MW 8.4  
Frac 19.3

TOC @  
0.

TOC @  
0.

Surface  
290. MD

Winta

w/78 washout

\*Stop

BHP

$$(0.052)(3800)(8.4) = 1660$$

Anticipate 2000

BDPE 2000 psi ✓

Gas

$$(10.12)(3800) = 456$$

2000

- 456

1544 psi

Surface csg 2950

70% = 2065

2528! TOC tail w/ 2% washout  
2200' BMSW

Max press. at csg shoe

3800

- 290

$$(0.22)(3510) = 772$$

2000

- 772

1228 psi

Test to 1228 psi ✓

(± 1100 psi surt. press.)

5-1/2"  
MW 8.4

Production  
3800. MD

3800' Green River

✓ Asquite OKD 9/20/06

Well name:

**09-06 Newfield Horsehoe Bend ST 12-36-6-21**

Operator:

**Newfield Production Company**

String type:

**Surface**

Project ID:

**43-047-38368**

Location:

**Uintah County****Design parameters:****Collapse**

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No

Surface temperature: 75 °F

Bottom hole temperature: 79 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 290 ft

**Burst:**

Design factor 1.00

Cement top: Surface

**Burst**

Max anticipated surface pressure:

255 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 290 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Non-directional string.

**Re subsequent strings:**

Next setting depth: 3,800 ft

Next mud weight: 8.400 ppg

Next setting BHP: 1,658 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 290 ft

Injection pressure 290 psi

Tension is based on buoyed weight.

Neutral point: 253 ft

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Internal Capacity (ft <sup>3</sup> ) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|--------------------------------------|
| 1       | 290                 | 8.625                   | 24.00                   | J-55             | ST&C                 | 290                  | 290                 | 7.972                   | 14                                   |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor                |
| 1       | 127                 | 1370                    | 10.826                  | 290              | 2950                 | 10.17                | 6                   | 244                     | 40.12 J                              |

Prepared Helen Sadik-Macdonald  
by: Utah Div. of Oil & MiningPhone: 801-538-5357  
FAX: 801-359-3940Date: September 6, 2006  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 290 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

|              |   |              |
|--------------|---|--------------|
| Well name:   | <b>09-06 Newfield Horsehoe Bend ST 12-36-6-21</b> |              |
| Operator:    | <b>Newfield Production Company</b>                | Project ID:  |
| String type: | Production  | 43-047-38368 |
| Location:    | Uintah County                                     |              |

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 128 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: ~~822~~ 342 psi  
Internal gradient: ~~0.22~~ 0.346 psi/ft  
Calculated BHP 1,658 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Non-directional string.

Tension is based on buoyed weight.  
Neutral point: 3,317 ft

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Internal Capacity (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1       | 3800                | 5.5                     | 15.50                   | J-55             | LT&C                 | 3800                 | 3800                | 4.825                   | 119.1                   |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor   |
| 1       | 1658                | 4040                    | 2.436                   | 1658             | 4810                 | 2.90                 | 51                  | 217                     | 4.22 J                  |

Prepared Helen Sadik-Macdonald  
by: Utah Div. of Oil & Mining

Phone: 801-538-5357  
FAX: 801-359-3940

Date: September 6, 2006  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 3800 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

NEWFIELD



July 28, 2006

State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Whitney  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: Horseshoe Bend State 3-36-6-21, and 12-36-6-21.

Dear Diana:

Enclosed find the Archaeological Field Survey for the above mentioned APD's. The 12-36-6-21 location was surveyed; however it was named the 13-36-6-21 in the report. If you have any questions regarding this, please give me a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

**RECEIVED**

**JUL 31 2006**

**DIV. OF OIL, GAS & MINING**

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S THREE 40 ACRE PARCELS  
FOR WELLS #3-36-6-21, #13-36-6-21, AND #5-32-6-22  
(T 6S, R 21E, S. 36 AND T 6S, R 22E, S. 32)  
IN UINTAH COUNTY, UTAH

By:

Patricia Stavish

Prepared For:

State of Utah  
School and Institutional Trust Land Administration

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, UT 84052

Submitted By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532

MOAC Report No. 06-228

July 19, 2006

United States Department of Interior (FLPMA)  
Permit No. 06-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-06-MQ-0918s

**RECEIVED**

**JUL 31 2006**

**DIV. OF OIL, GAS & MINING**

## INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) of Newfield Exploration's three 40 acre block parcels for well locations #3-36-6-21, #13-36-6-21, and #5-32-6-22 in Uintah County, Utah. The project area is located at Horseshoe Bend on both the western and eastern sides of the Green River, south of Vernal, Utah. The inventory was implemented at the request of Mandie Crozier of Newfield Exploration, Myton, Utah. The project occurs on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

The objective of the inventory was to locate, document and evaluate any cultural resources within the project area. This project was carried out in compliance with Federal and State legislation including the Antiquities Act of 1906, the National Historic Preservation Act (NHPA) of 1966 (as amended), the National Environmental and Historic Preservation Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, and the American Indian Religious Freedom Act of 1978.

The fieldwork was conducted on May 26, 2006 by Todd Seacat (Field Supervisor) and on June 14, 2006 by Keith R. Montgomery (Principal Investigator). The inventory was conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 06-UT-60122 and State of Utah Antiquities Project (Survey) No. U-06-MQ-0918s.

A file search was performed on May 15, 2006 by Keith Montgomery at the Bureau of Land Management (BLM), Vernal Field Office. This consultation indicated that several inventories for oil and gas development projects have been completed in the area; however, no archaeological sites were documented.

## DESCRIPTION OF PROJECT AREA

The project area occurs immediately east and west of the Green River near Horseshoe Bend, south of the town of Vernal, Uintah County, Utah. The legal description is Township 6 South, Range 21 East, Section 36; and Township 6 South, Range 22 East, Section 32 (Table 1, Figure 1). A total of 126.9 acres were inventoried for cultural resources on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

Table 1. Newfield Exploration's Three 40 Acre Parcels For Well Locations

| Well Designation | Legal Location              | Access/Pipeline | Cultural Resources |
|------------------|-----------------------------|-----------------|--------------------|
| #3-36-6-21       | NE/NW of Sec. 36, T6S, R21E | In 40 Acre      | None               |
| #13-36-6-21      | NE/SW of Sec. 36, T6S, R21E | In 40 Acre      | None               |
| #5-32-6-22       | SW/NW of Sec. 32, T6S, R22E | In 40 Acre      | None               |



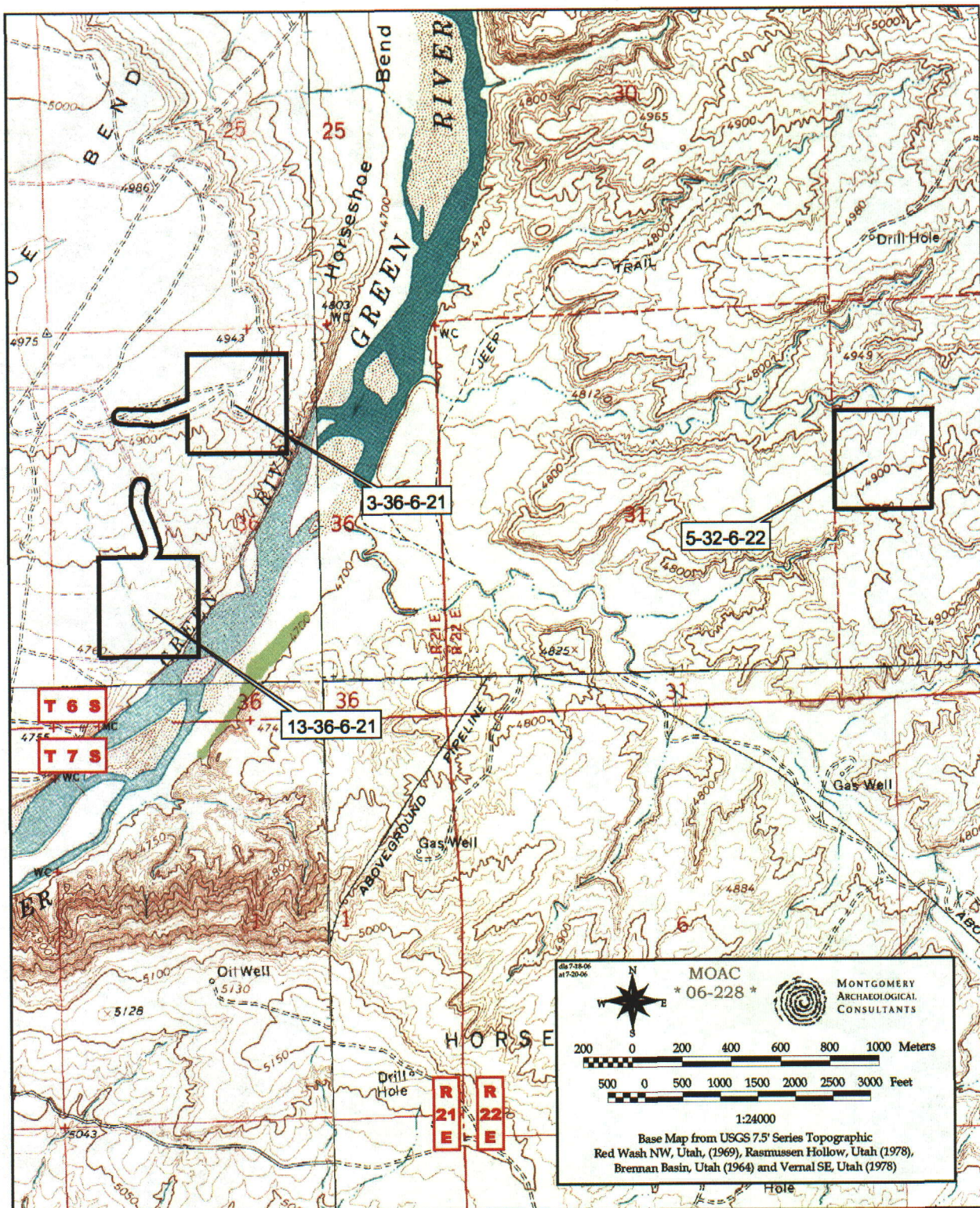


Figure 1. Inventory Area of Newfield Exploration's Three 40 Acre Parcels for Well Locations in Uintah County, Utah.



## Environment Setting

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. Topographically, this area consists of north-south trending interfluvial ridges dissected by extensive draws and canyons. The geology is comprised of Quaternary and Tertiary age deposits which include sedimentary rocks. The Duchesne River Formation is predominate in the project area, and contains claystone, sandstone, and carbonate beds. The soil in the area consists of sand and silt. Elevations in the inventory area range between 4760 and 4900 feet asl. Vegetation is dominated by a saltbush and greasewood community intermixed with prickly pear cactus, sagebrush, rabbitbrush and grasses. The nearest permanent water source in the area is the Green River. Fauna which inhabit the area include; deer, antelope, rabbits, badgers, ground squirrels, prairie dogs, and various other rodents and reptiles. Modern disturbances to the landscape include well locations, access roads, pipelines, and livestock grazing.

## SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. At the well locations, a 40 acre square parcel was defined, centered on the well pad center stake. The interior of the well locations were examined for cultural resources by the archaeologists walking parallel transects spaced no more than 10 meters (30 ft) apart. Access and pipeline corridors situated beyond the 40 acre blocks were examined to a width of 61 m (200 ft) employing the same methods. Ground visibility was considered good. A total of 126.9 acres were inventoried for cultural resources on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

## RESULTS AND RECOMMENDATIONS

The inventory of Newfield Exploration's three 40 acre block parcels for well locations #3-36-6-21, #13-36-6-21, and #5-32-6-22 with associated access/pipeline corridors resulted in the location of no cultural resources. Based on these findings, a recommendation of "no historic properties affected" is recommended for the undertaking pursuant to Section 106, 36 CFR 800.

## REFERENCES CITED

- Stokes, W. L.  
1986      *Geology of Utah*. Utah Museum of Natural History, University of Utah, Salt Lake City.

**From:** Ed Bonner  
**To:** Whitney, Diana  
**Date:** 8/16/2006 4:41:54 PM  
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

ConocoPhillips Company  
Utah 19-1182  
Utah 34-1217

Enduring Resources, LLC  
Bitter Creek 12-23-11-36  
Bitter Creek 12-23-21-36

EOG Resources, Inc  
Natural Cotton 66-36  
Natural Cotton 60-32  
Natural Cotton 74-19

Kerr McGee Oil & Gas Onshore LP (Westport)  
NBU 1022-19J

Newfield Production Company  
Horseshoe Bend State 3-36-6-21  
Horseshoe Bend State 12-36-6-21

Parallel Petroleum Corporation  
Buckskin Hills 13-32-3-22

If you have any questions regarding this matter please give me a call.

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

NEWFIELD



September 18, 2006

State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Whitney  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Amended Application for Permit to Drill, Horseshoe Bend State #12-36-6-21

Dear Diana:

Enclosed find the amended APD for the HSB State #12-36-6-21. During the State On-Site with Richard Powell it was determined that the proposed location needed to be moved. The new well name will be **Horseshoe Bend State #11-36-6-21**. The location footages as well as the 10 and 13 point plans have been amended. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

enclosures

cc: Richard Powell  
Helen McDonald  
Bureau of Land Management

RECEIVED

SEP 19 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**APPLICATION FOR PERMIT TO DRILL, DEEPEN**

1a. TYPE OF WORK **DRILL** ☒ **DEEPEN** ☐  
1b. TYPE OF WELL  
OIL ☒ GAS ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR  
**Newfield Production Company**  
3. ADDRESS AND TELEPHONE NUMBER:  
**Route #3 Box 3630, Myton, UT 84052 Phone: (435) 646-3721**

4. LOCATION OF WELL (FOOTAGE)  
At Surface **Lot #7 1584' FSL 1342' FWL**  
At proposed Producing Zone **40.252900 - 109.508093**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 19.8 miles southwest of Vernal, UT**

|  |  |   |
|--|--|---|
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)<br><b>Approx. 1342' f/lse line and NA' f/unit line</b> | 16. NO. OF ACRES IN LEASE<br><b>450.10</b> | 17. NO. OF ACRES ASSIGNED TO THIS WELL<br><b>Approx. 40</b> |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.<br><b>Approx. 4133'</b>   | 19. PROPOSED DEPTH<br><b>3800'</b>         | 20. ROTARY OR CABLE TOOLS<br><b>Rotary</b>                  |

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**4772' GL**

22. APPROX. DATE WORK WILL START\*  
**3rd Quarter 2006**

**23. PROPOSED CASING AND CEMENTING PROGRAM**

| SIZE OF HOLE | SIZE OF CASING | WEIGHT/FOOT | SETTING DEPTH | QUANTITY OF CEMENT                  |
|--------------|----------------|-------------|---------------|-------------------------------------|
| 12 1/4       | 8 5/8          | 24#         | 290'          | 155 sx +/- 10%                      |
| 7 7/8        | 5 1/2          | 15.5#       | TD            | 275 sx lead followed by 450 sx tail |
|              |                |             |               | See Detail Below                    |

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give date on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

\*The actual cement volumes will be calculated off of the open hole logs, plus 15% excess:

**SURFACE PIPE** - 155 sx Class G Cement +/- 10%, w/ 2% CaCl<sub>2</sub> & 1/4#/sk Cello-flake  
Weight: 15.8 PPG YIELD: 1.17 Cu Ft/sk H<sub>2</sub>O Req: 5 gal/sk

**LONG STRING** - Lead: Premium Lite II Cement + 3lbs/sk BA-90 + 3% KCl + .25 lbs/sk Cello Flake + 2 lbs/sk Kol Seal + 10% Bentonite + .5% Sodium Metasilicate  
Weight: 11.0 PPG YIELD: 3.43 Cu Ft/sk H<sub>2</sub>O Req: 21.04 gal/sk

Tail: 50-50 Poz-Class G Cement + 3% KCl + .25 lbs/sk Cello Flake + 2% Bentonite + .3% Sodium Metasilicate  
Weight: 14.2 PPG YIELD: 1.59 Cu Ft/sk H<sub>2</sub>O Req: 7.88 gal/sk

24. Name & Signature *Mandie Crozier* Title: Regulatory Specialist Date: 9/7/2006  
**Mandie Crozier**

(This space for State use only)

API Number Assigned: 43-047-38368 APPROVAL:

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 09-21-06  
By: *[Signature]*

# T6S, R21E, S.L.B.&M.

N89°50'W - 40.26 (G.L.O.)

S88°45'W - 38.02 (G.L.O.)

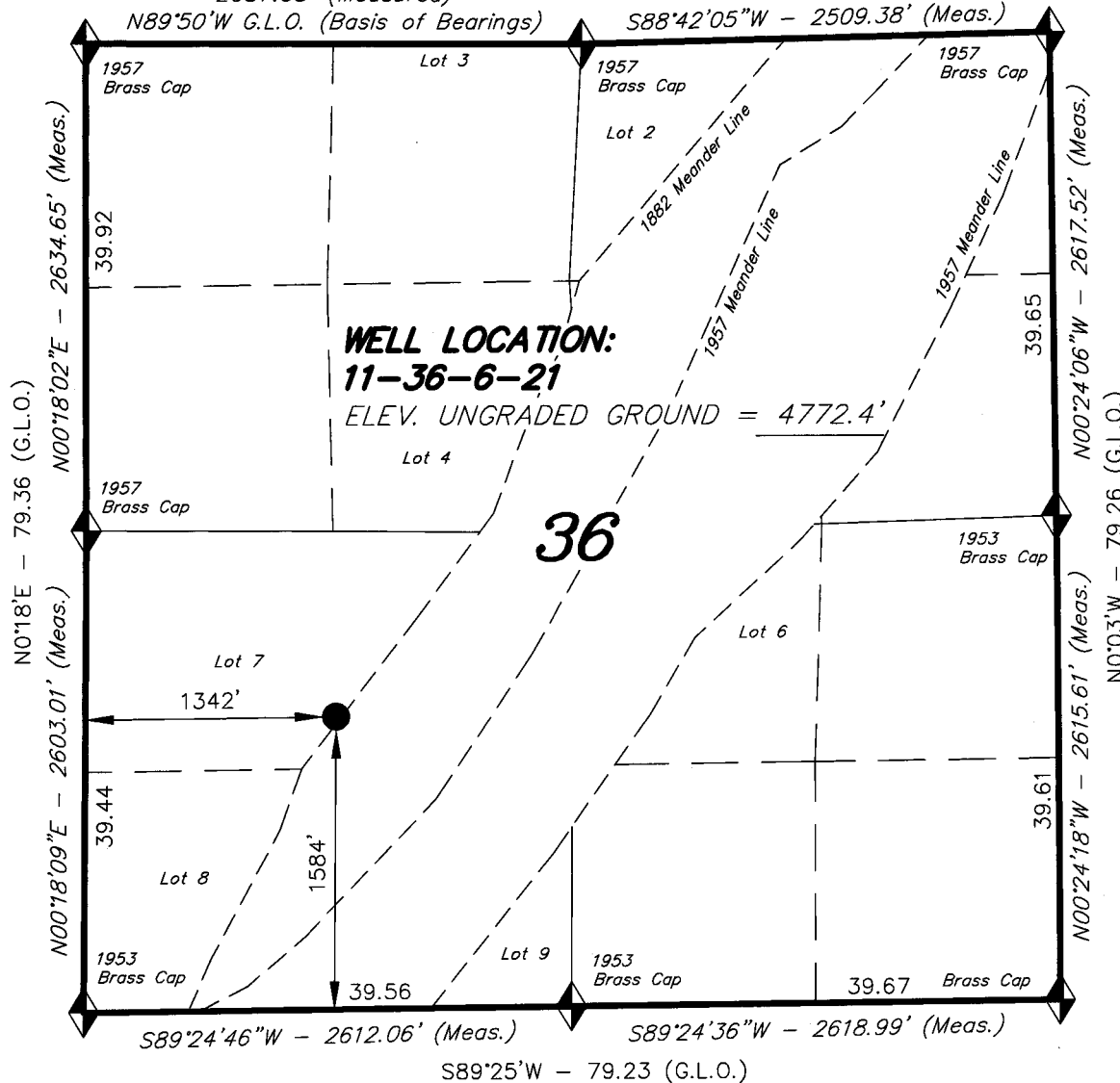
2657.65' (Measured)

N89°50'W G.L.O. (Basis of Bearings)

S88°42'05"W - 2509.38' (Meas.)

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, 11-36-6-21, LOCATED AS SHOWN IN LOT 7 OF SECTION 36, T6S, R21E, S.L.B.&M. UINTAH COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. No. 189377

STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (BRENNAN BASIN)

11-36-6-21  
(Surface Location) NAD 83  
LATITUDE = 40° 15' 10.35"  
LONGITUDE = 109° 30' 31.55"

### TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

|                           |                   |
|---------------------------|-------------------|
| DATE SURVEYED:<br>8-21-06 | SURVEYED BY: C.M. |
| DATE DRAWN:<br>8-23-06    | DRAWN BY: M.W.    |
| REVISED:                  | SCALE: 1" = 1000' |

NEWFIELD PRODUCTION COMPANY  
HORSESHOE BEND STATE #11-36-6-21  
LOT #7 SECTION 36, T6S, R21E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta                      0' - 3,800'  
Green River              3,800' +

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Uinta Formation (Gas)    3,305' - 3,800'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

|  |   |
|--|---|
| Location & Sample Interval                         | Date Sampled                                  |
| Flow Rate  | Temperature                                   |
| Hardness   | pH  |
| Water Classification (State of Utah)               | Dissolved Calcium (Ca) (mg/l)                 |
| Dissolved Iron (Fe) (ug/l)                         | Dissolved Sodium (Na) (mg/l)                  |
| Dissolved Magnesium (Mg) (mg/l)                    | Dissolved Carbonate (CO <sub>3</sub> ) (mg/l) |
| Dissolved Bicarbonate (NaHCO <sub>3</sub> ) (mg/l) | Dissolved Chloride (Cl) (mg/l)                |
| Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)        | Dissolved Total Solids (TDS) (mg/l)           |

4.

**PROPOSED CASING PROGRAM****a. Casing Design: Horseshoe Bend State 11-36-6-21**

| SIZE                                    | INTERVAL |      |      |      |                     | DESIGN FACTORS |               |                |
|---|----------|------|------|------|---------------------|----------------|---------------|----------------|
|   | TOP      | BTM  | WT   | GR   | CPLG                | BURST          | COLLAPSE      | TENSION        |
| *Surface Casing<br>8-5/8"               | 0        | 290  | 24   | K-55 | Csg Ratings:<br>STC | 2950<br>18.13  | 1370<br>14.85 | 263000<br>4.62 |
| **Production Casing<br>5-1/2" Prod mode |          |      |      |      | Csg Ratings:        | 4810           | 4040          | 217000         |
|   |          |      |      |      |                     | 3.59           | 3.01          | 1.99           |
| Stim mode                               | 0        | 3800 | 15.5 | J55  | LTC                 | 2.76           | 3.01          | 1.99           |

Assumptions:

- 1) Surf. Csg max anticipated surface pressure (MASP) = Fracture Gradient - Gas Gradient (0.115psi/ft\*TVDshoe)
- 2) Surface Casing Collapse = Fully evacuated casing = Pore Pressure - Gas Gradient (0.115psi/ft\*TVDshoe)
- 3) Surface Casing Tension = Air weight of casing + 50,000# overpull
- 4) Production Casing MASP (production mode) = Pore Pressure - Gas Gradient \* TVDshoe
- 4a) Prod csg MASP (stim mode) = Frac Gradient\*TVDshoe+Perf Friction+Pipe Friction - Hydr. Pressure
- 5) Production Casing Collapse = Fully evacuated casing = Pore Pressure - Gas Gradient (0.115psi/ft\*TVDshoe)
- 6) Production Casing Tension = Air weight of casing + 50,000# overpull

|   |        |            |
|---|--------|------------|
| *Fracture Gradient at surface casing shoe =     | 13.00  | ppg        |
| *Pore pressure at surface casing shoe =         | 8.33   | ppg        |
| **Pore pressure at production casing shoe =     | 9.00   | ppg        |
| **Fracture gradient at production casing shoe = | 0.80   | psi/ft     |
| **Perforation Friction =                        | 100.00 | psig       |
| **Pipe Friction =                               | 65.00  | psi/1000ft |
| **Fracture treatment displacement fluid =       | 8.33   | ppg        |

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

**b. Cementing Design: Horseshoe Bend State 11-36-6-21**

| FT OF FILL         |      | DESCRIPTION  | SACKS / FT <sup>3</sup> | EXCESS* | WEIGHT | YIELD |
|--------------------|------|--|-------------------------|---------|--------|-------|
| Surface csg        | 290  | Class G w/ 2% CaCl + ¼ lbs/sk Celloflake.  | 133 / 155               | 30%     | 15.8   | 1.17  |
| Prod. Csg<br>LEAD  | 2533 | *Prem-lite II w/ 10% gel + 3% KCl + 2 lbs/sk<br>Kol Seal + ¼ lbs/sk Celloflake + 3 lbs/sk<br>BA-90 | 192 / 658               | 50%     | 11.0   | 3.43  |
| Prod. Csg.<br>TAIL | 1267 | *50/50 Poz Class G w/ 2% gel + 3% KCl +<br>0.5% EC1 + ¼ lbs/sk Celloflake                          | 266 / 329               | 50%     | 14.3   | 1.24  |

\*Actual volume pumped will be 15% over caliper log

1) Compressive Strength of lead cmt: 1800 psi @ 24 hrs, 2250 psi @ 72 hrs

2) Compressive Strength of tail cmt: 2500 psi @ 24 hrs

Waiting On Cement: A minimum of four (4) hours shall elapse prior to attempting any pressure testing of the BOP equipment which would subject the surface casing cement to pressure, and a minimum of six (6) hours shall elapse before drilling the wiper plug, cement, or shoe. WOC time shall be recorded in the Driller's Log. Compressive Strength shall be a minimum of 500 psi prior to drilling out.

The Vernal BLM Office shall be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

The production casing cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals.

As a minimum, usable water zones shall be isolated and/or protected by having a cement top for the production casing at least 200 feet above the base of the usable water. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud being displaced ahead of the cement slurry.

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or to 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective action shall be taken.

A Form 3160-5, "Sundry Notices and Reports on Wells" shall be filed with the Vernal Office Manager within 30 days after the work is completed. This report must include the following information:

Setting of each string of casing showing the size, grade, weight of casing set, depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of the cementing tools used, casing test method and results, and the date of the work done. Spud date will be shown on the first reports submitted.

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The Company's Class III (3) 3M minimum specifications for pressure control equipment for a standard Uinta development well are as follows:

A 3000 psi WP hydraulic BOP stack consisting of two ram preventers (double or two singles) and an annular preventer per **Exhibit C**.

Connections - All components on the stack and choke and kill lines shall have either flanged, studded, clamp hub or equivalent proprietary connections except control line outlets and pressure gauges.

Annular Preventer - The annular shall be rated to a minimum 3000 psi WP, if one set of pipe rams is installed, and shall be installed at the top of the stack. If a 3 ram preventer and 2



preventers equipped with pipe rams are used, a 3000 psi WP is acceptable. A valve rated to full annular WP shall be mounted on the closing side using XX heavy fittings.

**Rams and Position** - The lower cavity shall contain pipe rams (master ram) to fit the upper section of the drill pipe in use. Casing rams are not required. The upper cavity shall contain blind rams for a 3 ram stack. A means shall be available to mechanically lock the rams closed.

**BOP Side Outlets** - The choke and kill lines outlets shall be a minimum 2 inches nominal and can be either in the BOP body between the rams or in a spool placed between the rams. Two gate valves rated to full BOP WP shall be installed on both outlets. The outside choke line valve shall be hydraulically operated.

**Choke and Kill Lines** - The lines shall be a minimum 2 inches nominal, made of seamless steel, seamless steel with Chiksan™ joints, or armored fire resistant hose rated to required BOP WP. The choke line shall be as straight as possible, and securely anchored. All turns shall be 90 degrees and "targeted." When hoses are used, they shall have a rated test pressure of at least 1.5 times the required BOP WP.

**Secondary Kill Outlet** - One outlet located below the lower rams either on the BOP stack or on the wellhead shall be fitted with two valves, a needle valve with adapter and pressure gauge, all rated to wellhead WP or greater. This outlet is not to be used in normal operations.

**Closing Methods** - At least three means of operating all the preventers shall be provided, consisting of any combination of the following:

- a. An air and/or electrically operated hydraulic pump(s) capable of closing one ram preventer in 30 seconds.
- b. An accumulator capable of closing all preventers and opening the hydraulic choke line valve, without requiring a recharge.
- c. Manual method with closing handles and/or wheels to be located in an unobstructed area, away from the wellhead, or additional equipment per item "a" and item "b" to provide full redundancy to method.
- d. Bottled nitrogen or other back-up storage system to equal accumulator capacity, manifolded to by-pass the accumulator and close the BOP directly.

**Hydraulic Closing Unit** - The closing unit shall be equipped with:

- a. A control manifold with a control valve for each preventer and hydraulically operated valve; a regulator for the annular preventer; and interconnected steel piping. Each blowout preventer control valve should be turned to open position during drilling operations.
- b. Control lines to BOPs of seamless steel, seamless steel lines with Chiksan joints, or fire resistant steel armored hose.
- c. A remote control panel from which each preventer and hydraulic valve can be operated. If the remote panel becomes inoperable, it shall not interfere with the operation of the main closing unit.

**Location** - For land locations, the hydraulic closing unit shall be located in an unobstructed area outside the substructure at least 50 feet from the wellhead and the remote panel shall be located near the driller's position. For offshore installations, the location of the closing unit and remote

panel shall be such that one is located near the driller position and the other is located away from the well area and is accessible from a logical evacuation route.

**Choke Manifold** - The minimum equipment requirements are shown in **Exhibit C**. The choke manifold shall be located at least 5 feet from the BOP stack, outside the substructure.

**Connections** - All components of the manifold shall be equipped with flanged, studded, clamped hub or equivalent proprietary connections (gauge connections exempted).

**Flow Wings** - Three flow wings shall be provided, capable of transmitting well returns through conduits that are a minimum 2 inches nominal. Two wings shall be equipped with chokes and one gate valve upstream of each choke; one gate valve ahead of the discharge manifold; and one valve downstream of each choke; at least one choke shall be adjustable. A gate valve shall be installed directly upstream of the cross if single valves are installed upstream of the chokes. One wing with one gate valve capable of transmitting well returns directly to the discharge manifold. The chokes, the valve(s) controlling the unchoked discharge wing, and all equipment upstream of these items shall be rated to required BOP WP.

**Discharge Manifold** - A discharge manifold (buffer tank), capable of diverting well returns overboard or to the blowdown/reserve pit; to the mud gas separator; and to the shaker tank is required. Lead-filled bull plugs (or equivalent erosion resistant components) shall be installed in the discharge manifold directly opposite the choked wings.

**Pressure Monitoring** - A means of monitoring the inlet pressure of the choke manifold shall be provided. The capability to isolate this outlet shall be provided.

**Drillstring Control Devices** - An upper and lower kelly valve, drillstring safety valve including correct closing handle, and an inside BOP shall be provided. The safety valve and inside BOP shall have connections or crossovers to fit all tubulars with OD to allow adequate clearance for running in the hole. All drillstring valves shall be rated to the required BOP WP.

**Auxiliary Equipment** - A kelly saver sub with casing protector larger than tool joints at top of drillstring (for kelly equipped rigs); a wear bushing or wear flange to protect the seal area of the wellhead while drilling; and a plug or cup type BOP test tool shall be provided.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 3M system, and individual components shall be operable as designed.

Function test of the BOP equipment shall be made daily. All required BOP tests and/or drills shall be recorded in the Driller's report.

Chart recorders will be used for all pressure tests. Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to BLM representatives upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2 regarding air or gas shall be adhered to. If a mist system is being utilized, the requirement for a deduster shall be waived.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to  $\pm$  3000 feet will be drilled with fresh water or an air/mist system, depending on the drilling contractor's preference. From approximately 3000 feet, or in the case of the air/mist system when hole conditions dictate, to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with KCL or DAP polymer additive. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated maximum mud weight is 9.2 lbs/gal based on the offset HSB 36-1-P well (API 43-047-31482). If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite.

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

None unless dictated by unanticipated well conditions.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

a. **Logging Program:**

(the log types run may change at the discretion of the geologist)

FDC/CNL/GR/DIL/SONIC: TD - 2,500'

CBL: A cement bond log will be run from TD to the top of cement behind the production casing. A field copy will be submitted to the Vernal BLM Office.

b. **Cores:** As deemed necessary.

c. **Drill Stem Tests:** No DSTs are planned in the Uinta/Green River section. It is possible that DST's may be required in the Uinta Formation.

Drill stem tests, if they are run, will adhere to the following requirements: Initial opening of the drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the Authorized Officer (AO). However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available ( i.e., lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released but tripping shall not begin before daylight, unless prior approval is obtained from the AO. Closed chamber DSTs may be performed day or night.

Some means of reverse circulation shall be provided in case of flow to the surface showing evidence of hydrocarbons.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

If a DST is performed, all engines within 100 feet of the wellbore that are required to be operational during the test shall have spark arresters or water-cooled exhausts.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

Possible abnormal temperatures and/or pressures are not anticipated in Uinta or Green River. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will be approximately equal total depth in feet multiplied by a 0.45 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

**a. Drilling Activity**

|                                |   |
|--------------------------------|---|
| Anticipated Commencement Date: | Upon approval of the site specific APD. |
| Drilling Days:                 | Approximately 4 days.                   |
| Completion Days:               | Approximately 4 days.                   |

**b. Notification of Operations**

The Vernal BLM office will be notified at least 24 hours prior to the commencement of spudding the well (to be followed with a Sundry Notice, Form 3160-5), of initiating pressure tests of the blowout preventer and related equipment, and running casing and cementing of all casing strings. Notification will be made during regular work hours (7:45 a.m.-4:30 p.m., Monday - Friday except holidays).

**Immediate Report:** Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the appropriate regulations, Onshore Orders, or BLM policy.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in suspended status without prior approval from the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given to the BLM before resumption of operations.

Daily drilling and completion reports shall be submitted to the Vernal BLM Office on a weekly basis.

Whether the well is completed as a dry hole or a producer, the "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. One copy of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Authorized Officer (AO).

A completion rig will be used for completion operations after the wells are stimulated to run the production tubing. All conditions of this approved plan will be applicable during all operations conducted with the completion rig.

Operator shall report production data to the MMS pursuant to 30 CFR 216.5 using form MMS/3160. In accordance with Onshore Oil and Gas Order No. 1, a well will be reported on form 3160-6, "Monthly Report of Operations," starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BLM Office.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated, or the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever occurs first; and for gas wells, as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated, or the date on which gas is measured through permanent metering facilities, whichever occurs first.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by written communication not later than 5 days following the date when the well is placed on production.

Pursuant to Onshore Order No. 7, with the approval of the AO, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During this period, an application for approval of the permanent disposal method must be submitted to the AO.

Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during the initial well evaluation tests, not to exceed 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the AO and approval received for any venting/flaring of gas beyond the initial 30 days or authorized test period.

A schematic facilities diagram, as required by 43 CFR 3162.7-5(b.9.d), shall be submitted to the Vernal BLM Office within 60 days of installation or first production, whichever occurs first. All site security regulations, as specified in Onshore Oil & Gas Order No. 3, shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5(b.4).

Well abandonment operations shall not be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment", Form 3160-5, will be filed with the Authorized Officer within 30 days following completion of the well for abandonment. This report will indicate placement of the plugs and current status of the surface restoration. Final Abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO, or the appropriate surface managing agency.

Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with the State and local laws, to the extent to which they are applicable, to operations on Federal or Indian lands.

NEWFIELD PRODUCTION COMPANY  
HORSESHOE BEND STATE #11-36-6-21  
LOT #7 SECTION 36, T6S, R21E  
UINTAH COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. EXISTING ROADS

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site Horseshoe Bend State 11-36-6-21 located in the Lot #7 Section 36, T6S, R21E, S.L.B. & M., Uintah County, Utah:

Proceed southwesterly out of Vernal, Utah – 10.4 miles  $\pm$  to the junction of this road and an existing road to the southwest; proceed southwesterly – 2.5 miles  $\pm$  to it's junction with an existing road to the southwest; proceed along this road – 6.1 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly – 0.5 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed southeasterly along the proposed access road – 1,610' to the proposed well location.

In the above mentioned paragraph, the highways are bituminous surfaced roads, all other roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. PLANNED ACCESS ROAD

Approximately 1,610' of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. LOCATION OF EXISTING WELLS

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing gas well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted Desert Tan. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Water for drilling and completion purposes will be obtained from one of the following sources. Refer to Exhibit "E" for a copy of the Water Use Authorization.

Owner: Target Trucking  
2960 North 500 East  
Vernal, Utah 84078  
(435) 789-6850

Owner: AC/DC Fence and Roustabout Company  
PO Box 1493  
Roosevelt, Utah 84066  
(435) 722-7673

Fresh water may also be purchased by Newfield Production from the Johnson Water District and trucked to the proposed location for the purpose of drilling. – **EXHIBIT D.**

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.



A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Water not meeting quality criteria will be disposed of at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

**The Archaeological Cultural Resource Survey is attached.**

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Horseshoe Bend State 11-36-6-21, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Horseshoe Bend State 11-36-6-21 Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Representative

Name: Brad Mecham  
Address: Newfield Production Company  
Route 3, Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

Please be advised that Newfield Production Company is considered to be the operator of well #11-36-6-21, Lot #7 Section 36, T6S, R21E, LEASE #ML-33225, Uintah County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4471291.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

9/18/66  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S THREE 40 ACRE PARCELS  
FOR WELLS #3-36-6-21, #13-36-6-21, AND #5-32-6-22  
(T 6S, R 21E, S. 36 AND T 6S, R 22E, S. 32)  
IN UINTAH COUNTY, UTAH

By:

Patricia Stavish

Prepared For:

State of Utah  
School and Institutional Trust Land Administration

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, UT 84052

Submitted By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532

MOAC Report No. 06-228

July 19, 2006

United States Department of Interior (FLPMA)  
Permit No. 06-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-06-MQ-0918s

## INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) of Newfield Exploration's three 40 acre block parcels for well locations #3-36-6-21, #13-36-6-21, and #5-32-6-22 in Uintah County, Utah. The project area is located at Horseshoe Bend on both the western and eastern sides of the Green River, south of Vernal, Utah. The inventory was implemented at the request of Mandie Crozier of Newfield Exploration, Myton, Utah. The project occurs on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

The objective of the inventory was to locate, document and evaluate any cultural resources within the project area. This project was carried out in compliance with Federal and State legislation including the Antiquities Act of 1906, the National Historic Preservation Act (NHPA) of 1966 (as amended), the National Environmental and Historic Preservation Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, and the American Indian Religious Freedom Act of 1978.

The fieldwork was conducted on May 26, 2006 by Todd Seacat (Field Supervisor) and on June 14, 2006 by Keith R. Montgomery (Principal Investigator). The inventory was conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 06-UT-60122 and State of Utah Antiquities Project (Survey) No. U-06-MQ-0918s.

A file search was performed on May 15, 2006 by Keith Montgomery at the Bureau of Land Management (BLM), Vernal Field Office. This consultation indicated that several inventories for oil and gas development projects have been completed in the area; however, no archaeological sites were documented.

## DESCRIPTION OF PROJECT AREA

The project area occurs immediately east and west of the Green River near Horseshoe Bend, south of the town of Vernal, Uintah County, Utah. The legal description is Township 6 South, Range 21 East, Section 36; and Township 6 South, Range 22 East, Section 32 (Table 1, Figure 1). A total of 126.9 acres were inventoried for cultural resources on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

Table 1. Newfield Exploration's Three 40 Acre Parcels For Well Locations

| Well Designation | Legal Location              | Access/Pipeline | Cultural Resources |
|------------------|-----------------------------|-----------------|--------------------|
| #3-36-6-21       | NE/NW of Sec. 36, T6S, R21E | In 40 Acre      | None               |
| #13-36-6-21      | NE/SW of Sec. 36, T6S, R21E | In 40 Acre      | None               |
| #5-32-6-22       | SW/NW of Sec. 32, T6S, R22E | In 40 Acre      | None               |

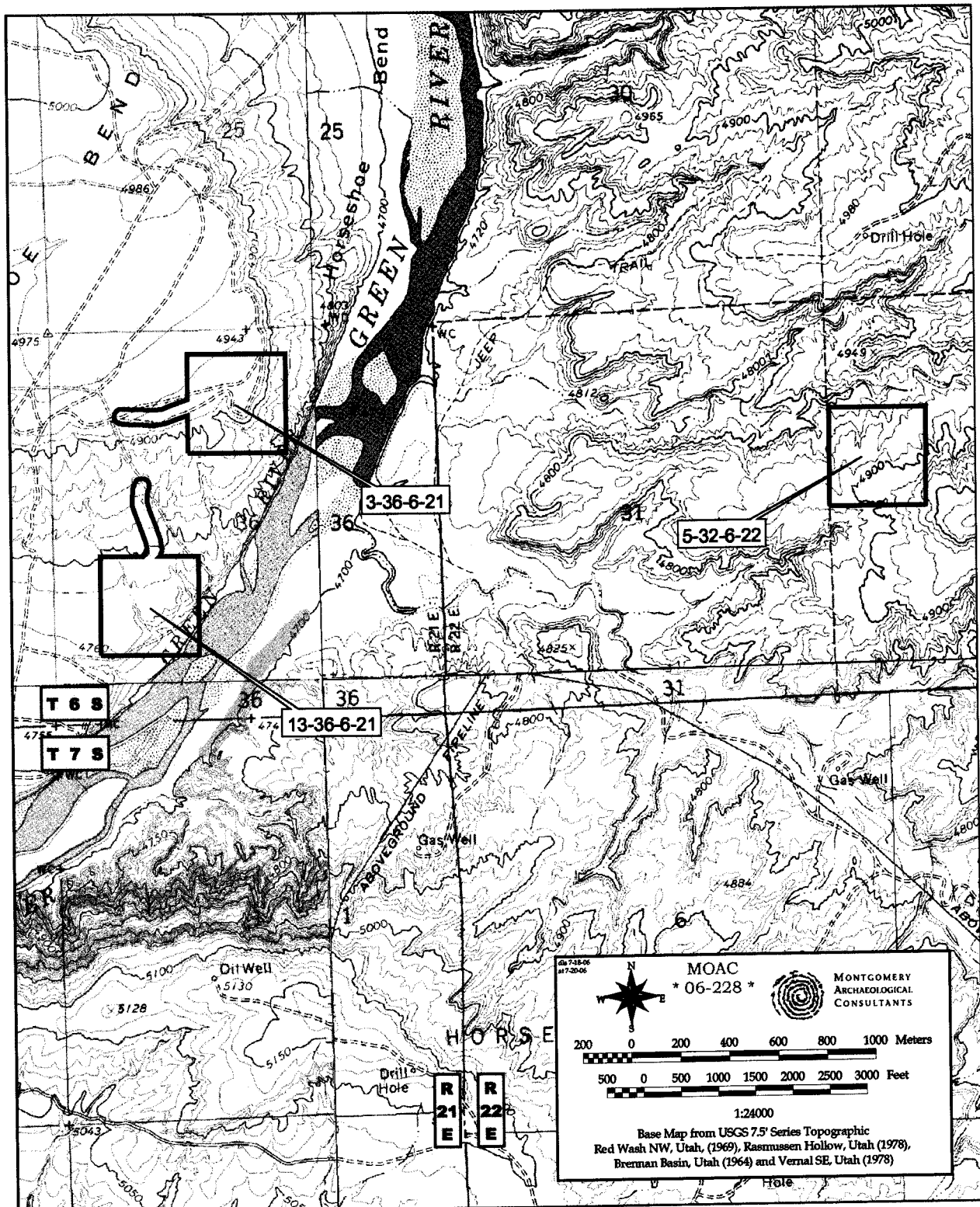


Figure 1. Inventory Area of Newfield Exploration's Three 40 Acre Parcels for Well Locations in Uintah County, Utah.

## Environment Setting

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. Topographically, this area consists of north-south trending interfluvial ridges dissected by extensive draws and canyons. The geology is comprised of Quaternary and Tertiary age deposits which include sedimentary rocks. The Duchesne River Formation is predominate in the project area, and contains claystone, sandstone, and carbonate beds. The soil in the area consists of sand and silt. Elevations in the inventory area range between 4760 and 4900 feet asl. Vegetation is dominated by a saltbush and greasewood community intermixed with prickly pear cactus, sagebrush, rabbitbrush and grasses. The nearest permanent water source in the area is the Green River. Fauna which inhabit the area include; deer, antelope, rabbits, badgers, ground squirrels, prairie dogs, and various other rodents and reptiles. Modern disturbances to the landscape include well locations, access roads, pipelines, and livestock grazing.

## SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. At the well locations, a 40 acre square parcel was defined, centered on the well pad center stake. The interior of the well locations were examined for cultural resources by the archaeologists walking parallel transects spaced no more than 10 meters (30 ft) apart. Access and pipeline corridors situated beyond the 40 acre blocks were examined to a width of 61 m (200 ft) employing the same methods. Ground visibility was considered good. A total of 126.9 acres were inventoried for cultural resources on lands administered by the State of Utah, School and Institutional Trust Lands Administration (SITLA).

## RESULTS AND RECOMMENDATIONS

The inventory of Newfield Exploration's three 40 acre block parcels for well locations #3-36-6-21, #13-36-6-21, and #5-32-6-22 with associated access/pipeline corridors resulted in the location of no cultural resources. Based on these findings, a recommendation of "no historic properties affected" is recommended for the undertaking pursuant to Section 106, 36 CFR 800.

## REFERENCES CITED

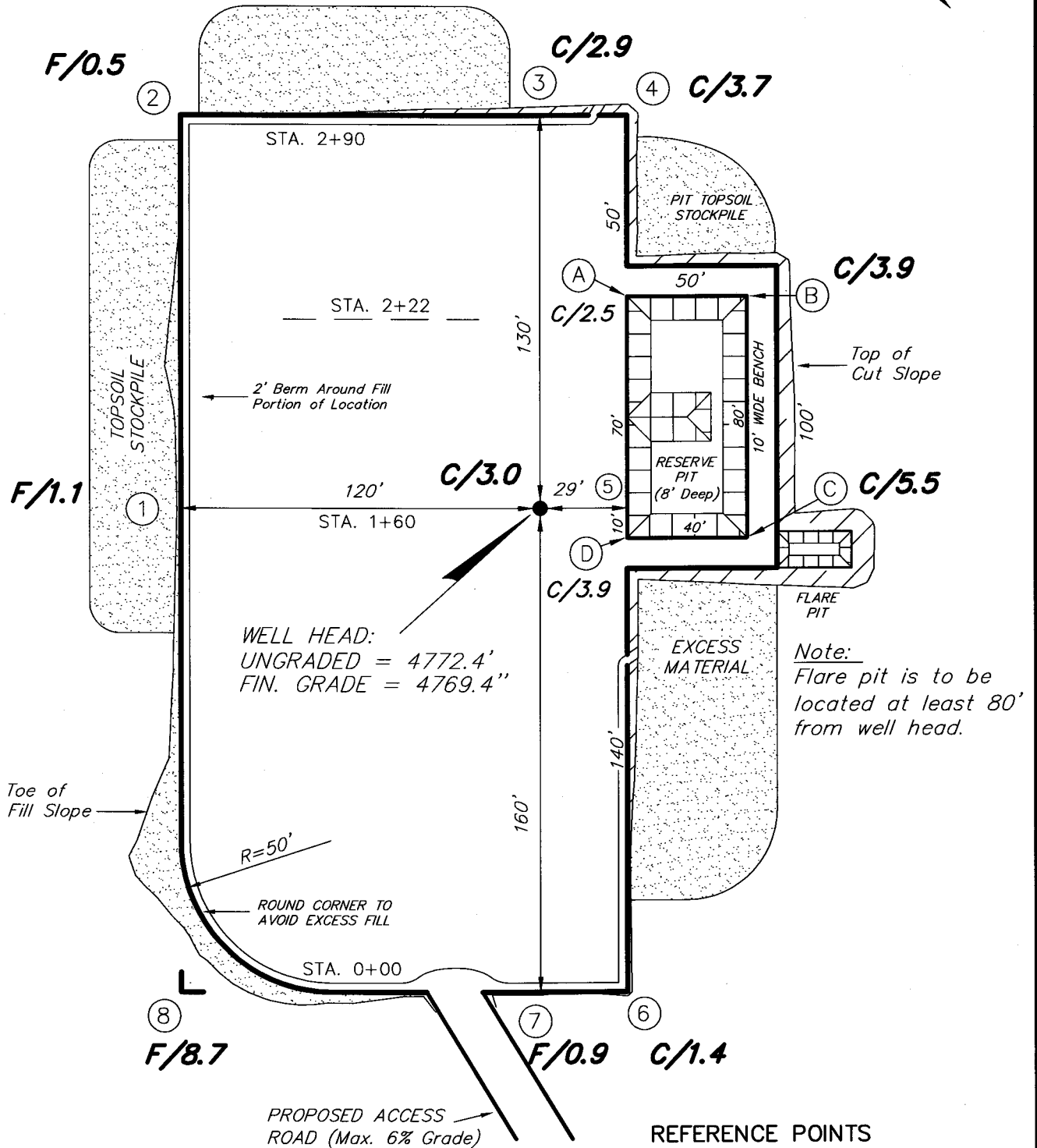
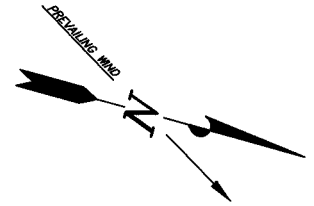
- Stokes, W. L.  
1986      *Geology of Utah*. Utah Museum of Natural History, University of Utah, Salt Lake City.



# NEWFIELD PRODUCTION COMPANY

11-36-6-21

Section 36, T6S, R21E, S.L.B.&M.



SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: M.W.

DATE: 8-23-06

**Tri State**  
Land Surveying, Inc.

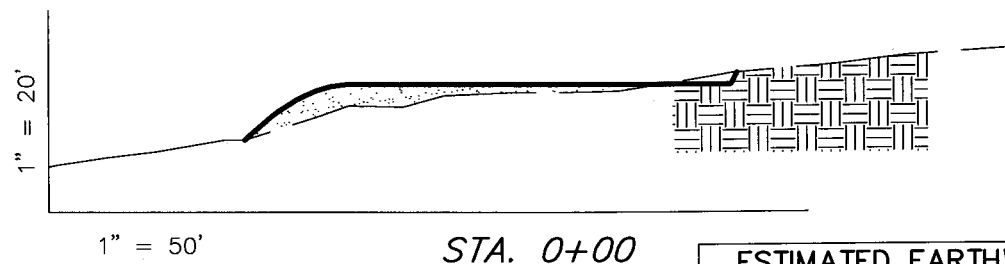
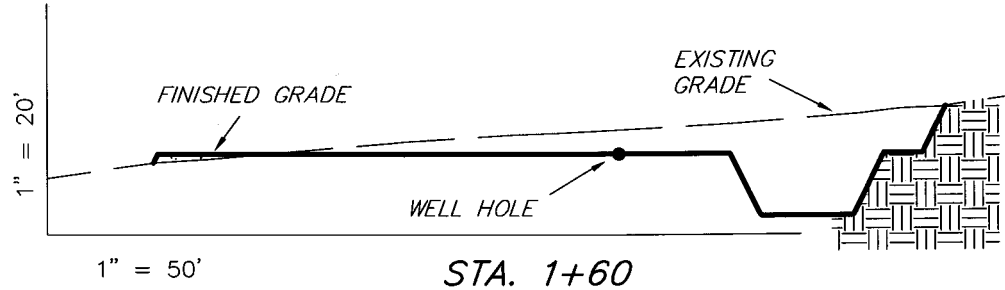
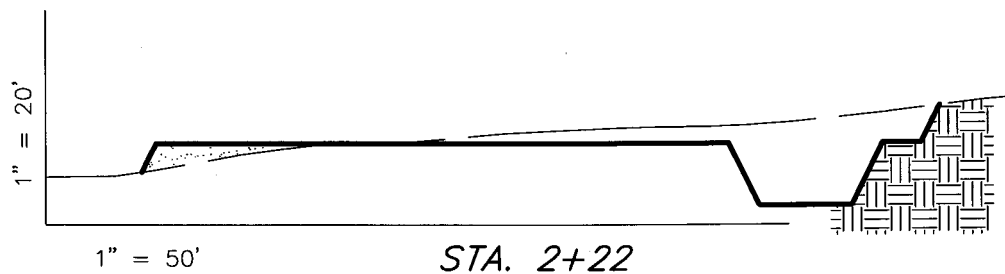
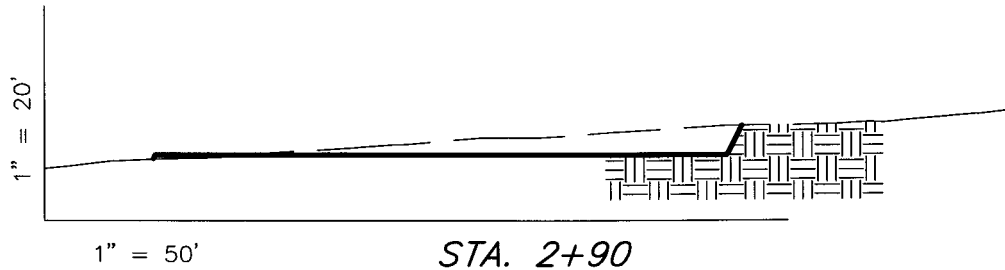
(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

11-36-6-21



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

| ESTIMATED EARTHWORK QUANTITIES<br>(No Shrink or swell adjustments have been used)<br>(Expressed in Cubic Yards) |       |       |  |        |
|---|-------|-------|--|--------|
| ITEM  | CUT   | FILL  | 6" TOPSOIL                               | EXCESS |
| PAD   | 2,140 | 2,140 | Topsoil is<br>not included<br>in Pad Cut | 0      |
| PIT   | 640   | 0     |  | 640    |
| TOTALS  | 2,780 | 2,140 | 957                                      | 640    |

SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: M.W.

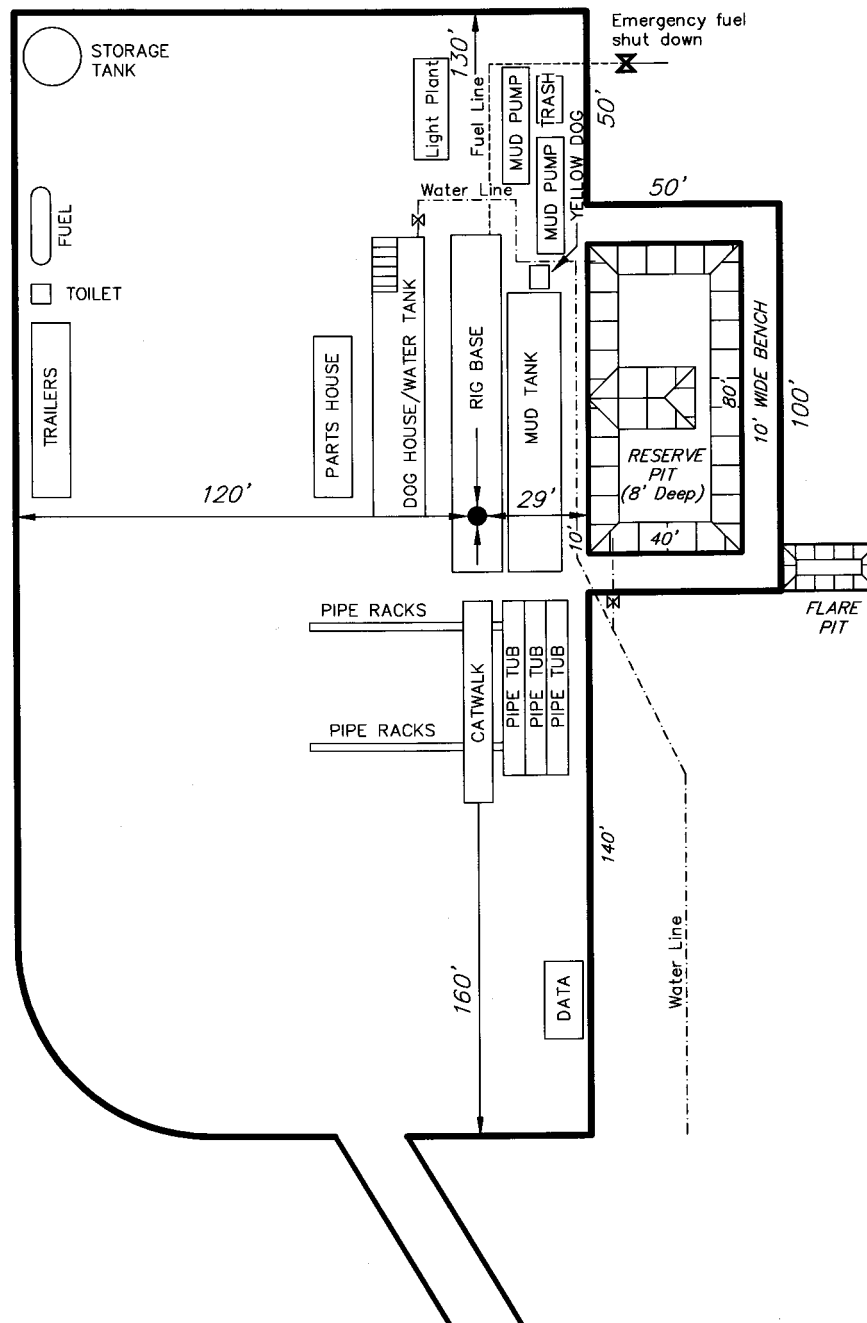
DATE: 8-23-06

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180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

### 11-36-6-21



SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: M.W.

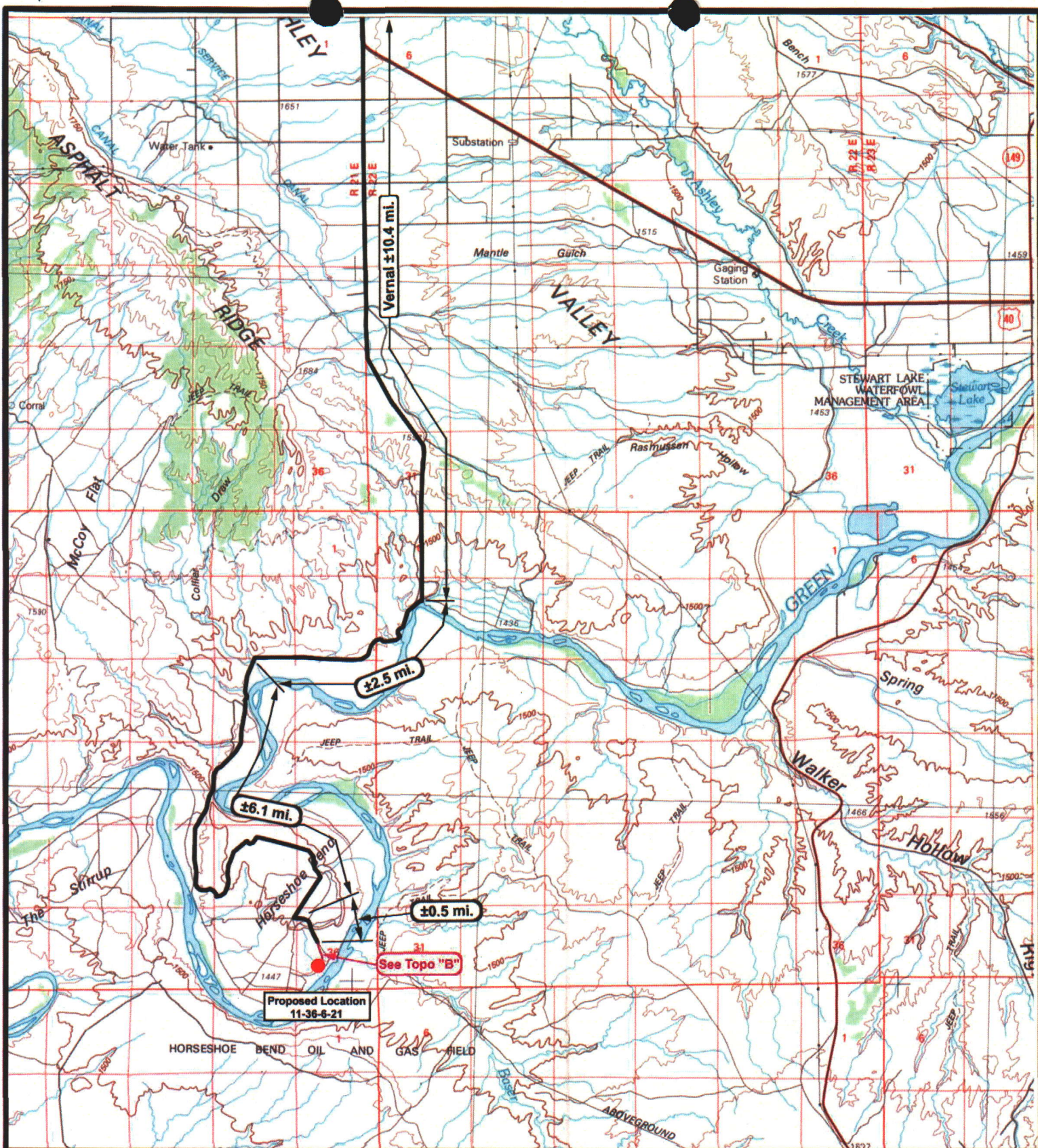
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**NEWFIELD**  
Exploration Company

**11-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**



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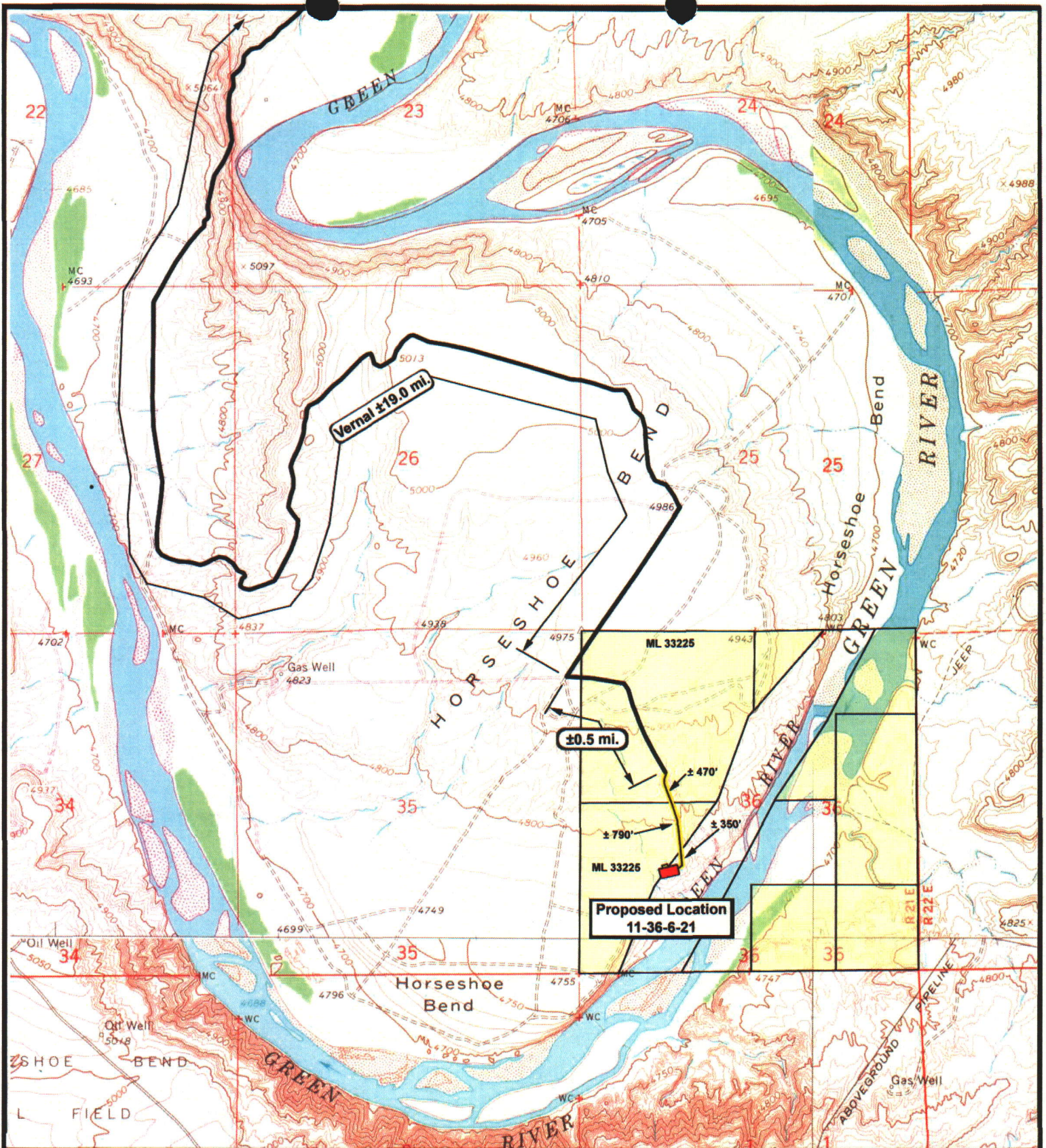
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DATE: 08-23-2006




**Legend**  
Existing Road  
Proposed Access

TOPOGRAPHIC MAP

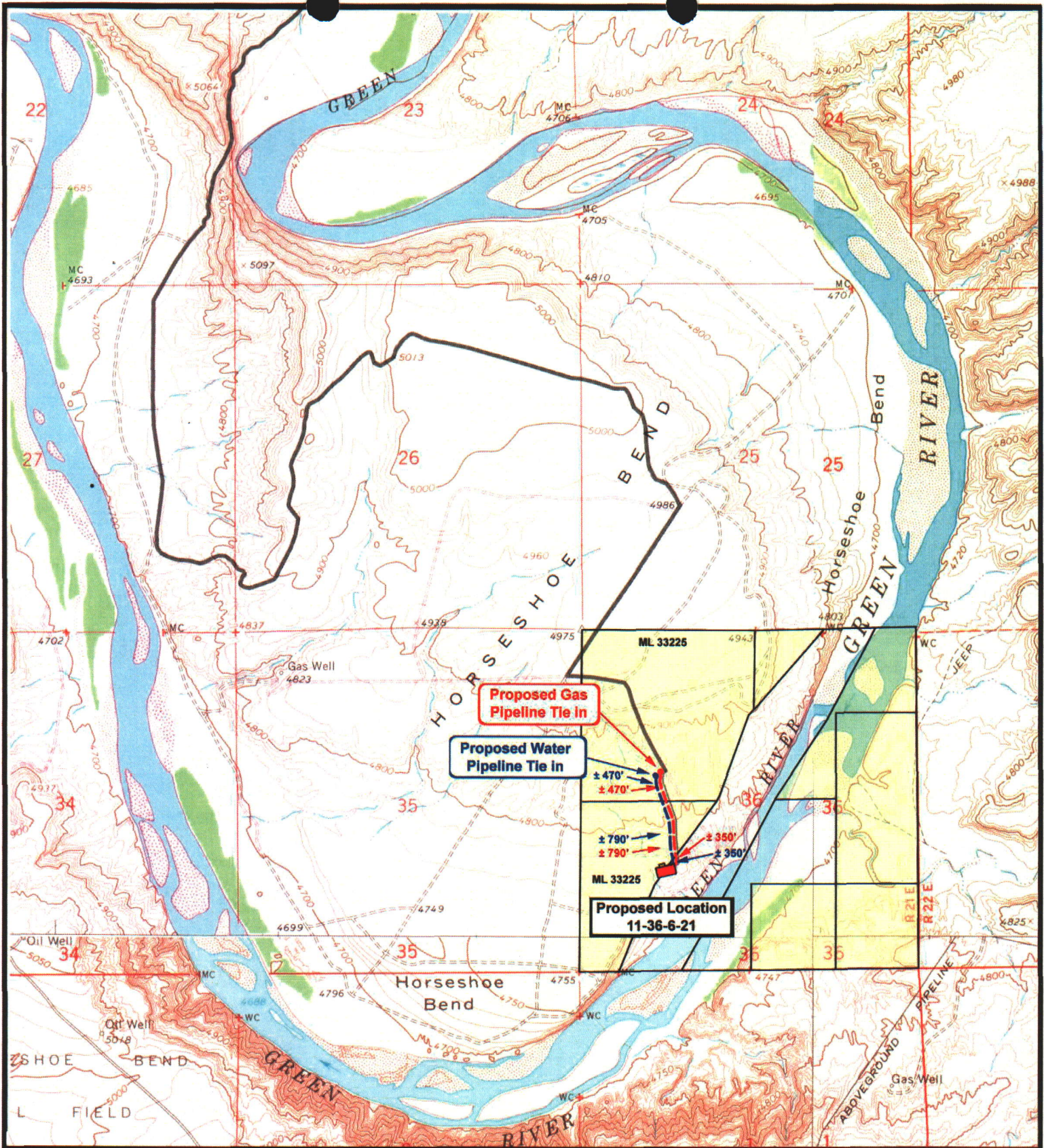
**"A"**






|  |   |   |  |
|--|---|---|--|
|  <p><b>NEWFIELD</b><br/>Exploration Company</p> <p><b>11-36-6-21</b><br/><b>SEC. 36, T6S, R21E, S.L.B.&amp;M.</b></p> |  |  <p><b>Tri-State</b><br/>Land Surveying Inc.<br/>(435) 781-2501<br/>180 North Vernal Ave. Vernal, Utah 84078</p> <p>SCALE: 1" = 2,000'<br/>DRAWN BY: mw<br/>DATE: 08-23-2006</p> | <p><b>Legend</b></p> <p>Existing Road<br/>Proposed Access</p> <p><b>TOPOGRAPHIC MAP</b><br/><b>"B"</b></p> |
|--|---|---|--|









**NEWFIELD**  
Exploration Company

**11-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**





N



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SCALE: 1" = 2,000'  
DRAWN BY: mw  
DATE: 08-23-2006

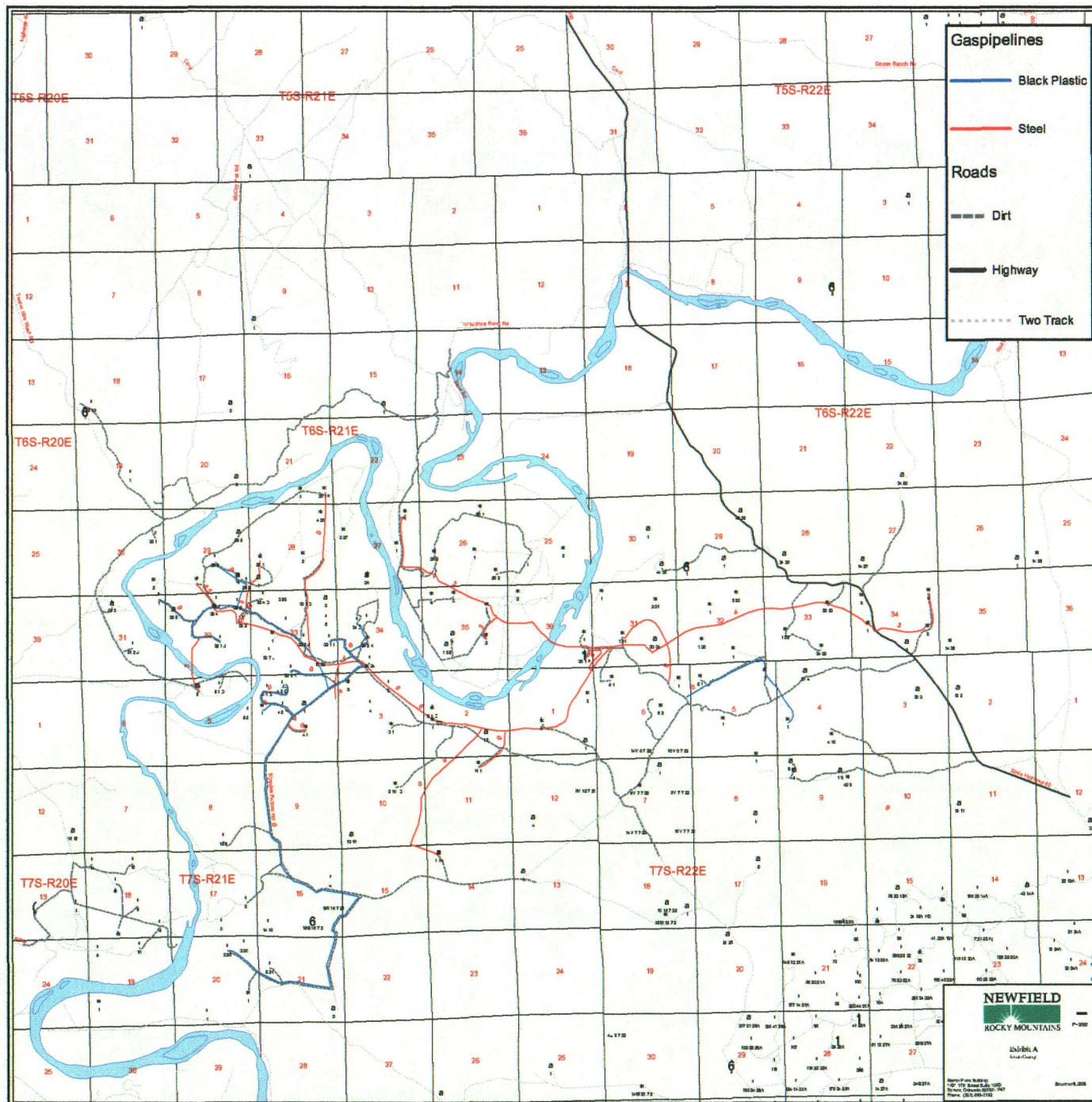
**Legend**

-  Roads
-  Proposed Gas Line
-  Proposed Water Line

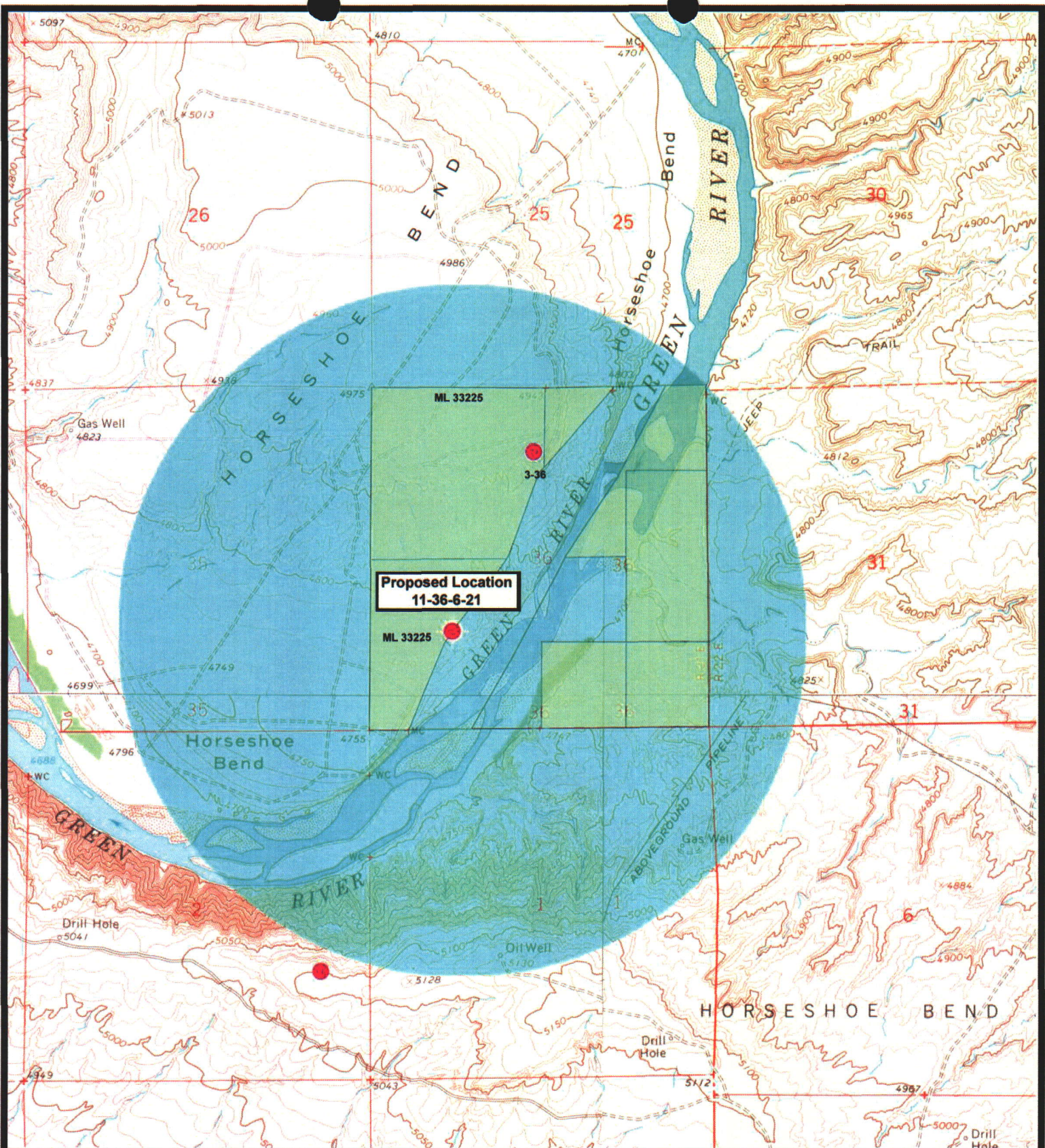
TOPOGRAPHIC MAP

**"C"**









**NEWFIELD**  
Exploration Company

**11-36-6-21**  
**SEC. 36, T6S, R21E, S.L.B.&M.**



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Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: mw  
DATE: 08-23-2006

**Legend**

- **Well Locations**
- **One-Mile Radius**

**Exhibit "B"**



# 3-M SYSTEM

## Blowout Prevention Equipment Systems

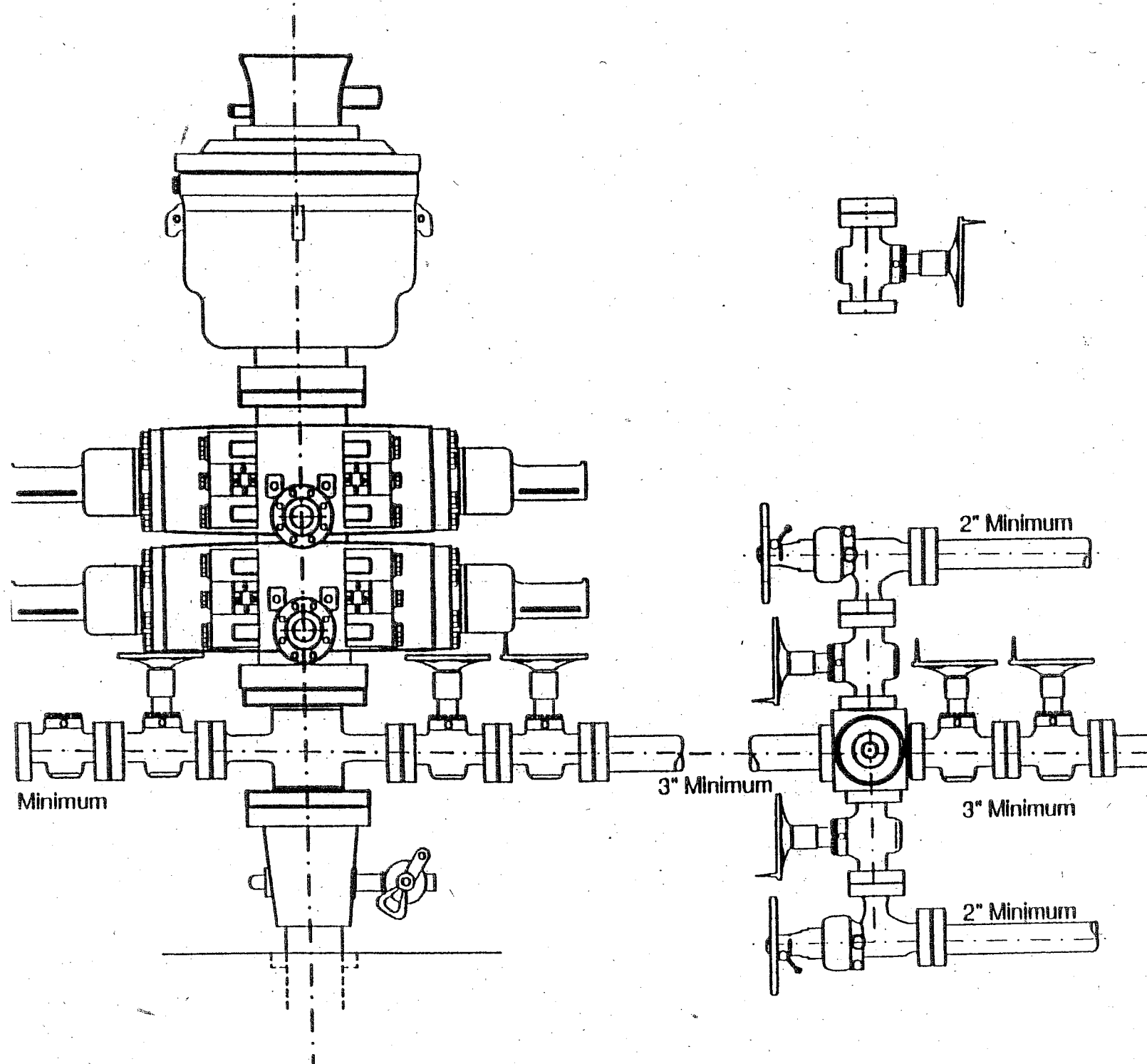


EXHIBIT C

Exhibit "E"

1 of 3



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Robert L. Morgan  
State Engineer

1594 West North Temple, Suite 220  
PO Box 146300  
Salt Lake City, Utah 84114-6300  
801-538-7240  
801-538-7467 (Fax)

August 11, 2000

Target Trucking 43-10988  
Dan McKee or R.C. Hacking  
3960 North 500 East  
Vernal, UT 84078

Dear Applicant:

RE: APPROVED APPLICATION  
NUMBER 43-10988 (F72511)

This is your authority to develop the water under the above referenced application which under Sections 73-3-10 and 73-3-12, Utah Code Annotated, 1953, as amended, must be diligently prosecuted to completion. The water must be put to beneficial use and proof of beneficial use be made to the State Engineer on or before August 31, 2003; otherwise, the application will be lapsed.

Proof of beneficial use is evidence to the State Engineer that the water has been placed to its full intended beneficial use. By law, it must be prepared by a registered engineer or land surveyor, who will certify to the location and the uses for the water. Your proof of beneficial use will become the basis for the extent of your water right.

Failure on your part to comply with the requirements of the statutes may result in forfeiture of this application. It is the applicant's obligation to maintain a current address with this office. Please notify this office immediately of any change.

Also enclosed are two post cards. You must give the Driller (Start) Card to the licensed driller with whom you contract to construct the well(s). The other card is the Applicant Card which is your responsibility to sign and return to this office immediately after final completion of the well. CAUTION: There may be local health department requirements for the actual siting of your well. Please check with the proper local authority before construction begins.

Your contact with this office, should you need it, is with the Vernal Regional Office. The telephone number is (435)781-5327.

Sincerely,

Robert L. Morgan, P.E.  
State Engineer

RLM:et

Encl.: Memorandum Decision

Resolution No. 05- 05 - 209  
Uintah and Ouray Agency  
Fort Duchesne, UT

**WHEREAS,** the Ute Tribal Business Committee, has the right to approve or veto any sale, disposition, lease or encumbrance of Tribal Lands, interest in Tribal lands or other Tribal assets, which may be authorized or execute by officials or Agency of the Government, provides that no Tribal lands shall ever be encumbered or sold, except leases for mining purposes or on irrigable land may be made for such longer periods as may be authorized by law;

**WHEREAS,** Energy producers Reservation wide have a need for industrial water to drill oil and gas wells; and

**WHEREAS,** AC/DC Fence and Roustabout Company proposes to pump water out and to build French drains, if needed, from Reservation wide to supply industrial water to the energy producers for the purpose of drilling oil and gas wells; and

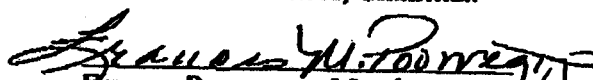
**WHEREAS,** Energy producers within the boundaries of the U & O reservation; have a need for industrial water to drill oil and gas wells. Also, to build French drains, as needed; and

**WHEREAS,** AC/DC Fencing and Roustabout Company, proposes to pay the Ute Indian Tribe a reasonable market value of five (.5) cents for each barrel of water sold to energy producers through their company, and twenty-five (.25) cents to AC/DC for a total of thirty (.30) cents per barrel,

**NOW, THEREFORE, BE IT RESOLVED BY THE TRIBAL BUSINESS COMMITTEE OF THE UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION, UTAH,** in order to promote independent business among tribal members, and to foster the economic welfare of tribal members and to develop if needed Group VI water rights of the Ute Indian Tribe, the Ute Indian Tribe hereby grants authority to AC/DC Fence and Roustabout Company to develop resources Reservation wide for the purpose of energy development.

**BE IT FURTHER RESOLVED,** that AC/DC Fence and Roustabout pay a reasonable market value for all water sold through their company for a period of two (2) year.

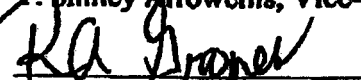
  
M. Maxine Natchecs, Chairman

  
Frances Poowegup, Member

  
Irene Cuch, Member

ABSENT

  
P. Smiley Arrowohis, Vice-Chairman

  
Ronald A. Groves, Member

  
Richard Jenks Jr, Member

## CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Tribal Business Committee of the Ute Indian Tribe of the Uintah and Ouray Reservation, Utah, at a duly called meeting at Fort Duchesne, Utah, on the 13 day of July, 2005, at which time a quorum was present and voted 5 FOR, 0 AGAINST, 0 ABSTAINING, and 1 ABSENT.

Denene Kane  
Secretary of the Tribal Business Committee



**State of Utah**  
**Department of**  
**Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of**  
**Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

September 21, 2006

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Horseshoe Bend State 11-36-6-21 Well, 1584' FSL, 1342' FWL, NW SW,  
Sec. 36, T. 6 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38368.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
SITLA



Operator: Newfield Production Company  
Well Name & Number Horseshoe Bend State 11-36-6-21  
API Number: 43-047-38368  
Lease: ML-33225

Location: NW SW                      Sec. 36                      T. 6 South                      R. 21 East

### Conditions of Approval

1. **General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. **Notification Requirements**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. Surface casing shall be cemented to the surface.

## STATE OF UTAH

## DIVISION OF OIL, GAS, AND MINING

|   |  |  |
|---|--|--|
| 1. <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br><b>ML-33225</b>         |
| Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.<br>Use *APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals. |  | 6. IF INDIAN, ALLOTTEE OR TRIBAL NAME<br><b>N/A</b>            |
| OIL <input type="checkbox"/> GAS <input type="checkbox"/><br>WELL <input checked="" type="checkbox"/> WELL <input type="checkbox"/> OTHER <input type="checkbox"/>                                  |  | 7. UNIT AGREEMENT NAME<br><b>NA</b>                            |
| 2. NAME OF OPERATOR<br><b>INLAND PRODUCTION COMPANY</b>   |  | 8. WELL NAME and NUMBER<br><b>HORSESHOE BEND ST 11-36-6-21</b> |
| 3. ADDRESS AND TELEPHONE NUMBER<br><b>Rt. 3 Box 3630, Myton Utah 84052<br/>435-646-3721</b>   |  | 9. API NUMBER<br><b>43-047-38368</b>                           |
| 4. LOCATION OF WELL<br><br>Footages <b>1584 FSL 1342 FWL</b><br><br>QQ, SEC, T, R, M: <b>NW/SW Section 36, T6S R21E</b>   |  | 10. FIELD AND POOL, OR WILDCAT<br><b>HORSESHOE BEND</b>        |
|   |  | COUNTY <b>UINTAH</b><br>STATE <b>UTAH</b>                      |

|  |   |
|--|---|
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA   |   |
| NOTICE OF INTENT:<br>(Submit in Duplicate)<br><input type="checkbox"/> ABANDON <input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> REPAIR CASING <input type="checkbox"/> PULL OR ALTER CASING<br><input checked="" type="checkbox"/> CHANGE OF PLANS <input type="checkbox"/> RECOMPLETE<br><input type="checkbox"/> CONVERT TO INJECTION <input type="checkbox"/> REPERFORATE<br><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE <input type="checkbox"/> VENT OR FLARE<br><input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/> WATER SHUT OFF<br><input type="checkbox"/> OTHER _____ | SUBSEQUENT REPORT OF:<br>(Submit Original Form Only)<br><input type="checkbox"/> ABANDON* <input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> REPAIR CASING <input type="checkbox"/> PULL OR ALTER CASING<br><input type="checkbox"/> CHANGE OF PLANS <input type="checkbox"/> RECOMPLETE<br><input type="checkbox"/> CONVERT TO INJECTION <input type="checkbox"/> REPERFORATE<br><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE <input type="checkbox"/> VENT OR FLARE<br><input type="checkbox"/> OTHER _____<br>DATE WORK COMPLETED _____<br>Report results of Multiple Completion and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.<br>*Must be accompanied by a cement verification report. |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.

Newfield Production Company requests to amend the Drilling Water Source that will be used for the purposes of drilling the above mentioned well. It is proposed that we will use either of the two approved sites:  
 Permit # 43-9077, William E. Brown, Sec. 32, T6S R20E  
 Permit #43-10447, Kenneth Joe Batty, Sec. 9, T8S R20E  
 A conv of the approved State of Utah Water Source Permits are Attached.

13. NAME & SIGNATURE: Mandie Crozier TITLE Regulatory Specialist DATE 11/20/2006  
 (This space for State use only)

RECEIVED  
NOV 21 2006

**RECEIVED**  
**DEC 17 1999**  
**WATER RIGHTS**  
**VERNAL**

# FILING FOR WATER IN THE STATE OF UTAH

Rec. by AC  
 Fee Rec. 100<sup>00</sup> CASH  
 Receipt # 00-00162

## APPLICATION TO APPROPRIATE WATER

JAN 07 2000

WATER RIGHTS  
 SALT LAKE

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements to Title 73, Chapter 3 of the Utah Code Annotated (1993, as amended)

WATER RIGHT NUMBER: 43 - 10991

APPLICATION NUMBER: F72519

### 1. OWNERSHIP INFORMATION:

LAND OWNED? YES

A. NAME: Kenneth Joe Batty  
 ADDRESS: 1600 North 1500 West, Vernal, UT 84078

B. PRIORITY DATE: December 17, 1999

FILING DATE: December 17, 1999

### 2. SOURCE INFORMATION:

A. QUANTITY OF WATER: 0.25 cfs

B. SOURCE: Under Ground Water Well

COUNTY: Uintah

C. POINT OF DIVERSION -- UNDERGROUND:

(1) N 1160 feet W 500 feet from NW corner, Section 3, T 38N, R 20E, S18E

WELL DIAMETER: 12 inches

WELL DEPTH: 70 feet

COMMENT: Existing well drilled under Water Right 43-10447

D. COMMON DESCRIPTION: 3.5 miles north of Ouray

### 3. WATER USE INFORMATION:

OIL EXPLORATION: from JAN 1 to DEC 31 Oil and Gas drilling and production.

### 4. EXPLANATORY:

20 Year fixed time application

Place of Use: Pumped in to trucks and delivered for oil and gas drilling & production within the Uintah Basin

Appropriate

# APPLICATION FOR TEMPORARY CHANGE OF WATER

## STATE OF UTAH

Rec. by \_\_\_\_\_

Fee Paid \$ \_\_\_\_\_

Receipt # \_\_\_\_\_

Microfilmed \_\_\_\_\_

Roll # \_\_\_\_\_

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

CHANGE APPLICATION NUMBER: 821552

WATER RIGHT NUMBER: 43 - 9077

\*\*\*\*\*

This Change Application proposes to change the POINT(S) OF DIVERSION, PLACE OF USE, and NATURE OF USE.

\*\*\*\*\*

### 1. OWNERSHIP INFORMATION.

A. NAME: William E. Brown  
ADDRESS: HC 69 Box 160, Randlett, UT 84063

INTEREST: 100%

B. PRIORITY OF CHANGE: September 19, 1997

FILING DATE: September 19, 1997

C. EVIDENCED BY:  
43-9077 (A56977)

-----  
\* DESCRIPTION OF CURRENT WATER RIGHT: \*  
-----

### 2. SOURCE INFORMATION.

A. QUANTITY OF WATER: 0.015 cfs

B. SOURCE: Unnamed Spring Area

COUNTY: Uintah

C. POINT OF DIVERSION -- SURFACE:

(1) S 1120 feet W 1320 feet from NE corner, Section 32, T 6S, R 20E, SLEM

DIVERT WORKS: Collection box

SOURCE: Unnamed Spring Area

### 3. WATER USE INFORMATION.

STOCKWATERING: from Jan 1 to Dec 31.

EQUIVALENT LIVESTOCK UNITS: 120.

\*\*\*\*\*

Temporary Change

RECEIVED

OCT 03 2007

DIV. OF OIL, GAS &amp; MINING

STATE OF UTAH

DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.

Use \*APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

OIL ☐ GAS ☐  
WELL ☐ WELL ☐ OTHER ☒

## 2. NAME OF OPERATOR

NEWFIELD PRODUCTION COMPANY

## 3. ADDRESS AND TELEPHONE NUMBER

Rt. 3 Box 3630, Myton Utah 84052  
435-646-3721

## 4. LOCATION OF WELL

Footages 1584 FSL 1342 FWL

QQ, SEC, T, R, M: NW/SW Section 36, T6S R21E

## 5. LEASE DESIGNATION AND SERIAL NO.

ML-33225

## 6. IF INDIAN, ALLOTTEE OR TRIBAL NAME

N/A

## 7. UNIT AGREEMENT NAME

NA

## 8. WELL NAME and NUMBER

HORSESHOE BEND ST 11-36-6-21

## 9. API NUMBER

43-047-38368

## 10. FIELD AND POOL, OR WILDCAT

HORSESHOE BEND

COUNTY UINTAH

STATE UTAH

## 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

## NOTICE OF INTENT:

(Submit in Duplicate)

- ☐ ABANDON ☐ NEW CONSTRUCTION
- ☐ REPAIR CASING ☐ PULL OR ALTER CASING
- ☐ CHANGE OF PLANS ☐ RECOMPLETE
- ☐ CONVERT TO INJECTION ☐ REPERFORATE
- ☐ FRACTURE TREAT OR ACIDIZE ☐ VENT OR FLARE
- ☐ MULTIPLE COMPLETION ☐ WATER SHUT OFF
- ☒ OTHER Permit Extension

## SUBSEQUENT REPORT OF:

(Submit Original Form Only)

- ☐ ABANDON\* ☐ NEW CONSTRUCTION
- ☐ REPAIR CASING ☐ PULL OR ALTER CASING
- ☐ CHANGE OF PLANS ☐ RECOMPLETE
- ☐ CONVERT TO INJECTION ☐ REPERFORATE
- ☐ FRACTURE TREAT OR ACIDIZE ☐ VENT OR FLARE
- ☐ OTHER \_\_\_\_\_

DATE WORK COMPLETED \_\_\_\_\_

Report results of Multiple Completion and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\*Must be accompanied by a cement verification report.

## 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)

Newfield Production Company requests to extend the Permit to Drill this well for one more year. The original approval date was 9/21/06.

13.

NAME &amp; SIGNATURE

Mandie Crozier

TITLE

Regulatory Specialist

DATE

10/4/2007

(This space for State use only)

4/94

\* See Instructions On Reverse Side

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 10-10-07

By: [Signature]

10-11-07  
RM



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38368  
**Well Name:** Horseshoe Bend State 11-36-6-21  
**Location:** NW/SW Section 36, T6S R21E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 9/21/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☒ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

10/4/2007

Date

Title: Regulatory Specialist

Representing: Newfield Production Company

## STATE OF UTAH

## DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.

Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN" form for such proposals.

OIL ☐ GAS ☐  
WELL ☐ WELL ☐ OTHER ☒2. NAME OF OPERATOR  
**NEWFIELD PRODUCTION COMPANY**3. ADDRESS AND TELEPHONE NUMBER  
**Rt. 3 Box 3630, Myton Utah 84052  
435-646-3721**4. LOCATION OF WELL  
  
Footages **1584 FSL 1342 FWL**  
  
QQ, SEC, T, R, M: **NW/SW Section 36, T6S R21E**5. LEASE DESIGNATION AND SERIAL NO.  
**ML-33225**6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  
**N/A**7. UNIT AGREEMENT NAME  
**NA**8. WELL NAME and NUMBER  
**HORSESHOE BEND ST 11-36-6-21**9 API NUMBER  
**43-047-38368**10 FIELD AND POOL, OR WILDCAT  
**HORSESHOE BEND**COUNTY **UINTAH**  
STATE **UTAH**11. **CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

## NOTICE OF INTENT:

(Submit in Duplicate)

☐ ABANDON ☐ NEW CONSTRUCTION

☐ REPAIR CASING ☐ PULL OR ALTER CASING

☐ CHANGE OF PLANS ☐ RECOMPLETE

☐ CONVERT TO INJECTION ☐ REPERFORATE

☐ FRACTURE TREAT OR ACIDIZE ☐ VENT OR FLARE

☐ MULTIPLE COMPLETION ☐ WATER SHUT OFF

☒ OTHER **Permit Extension**

## SUBSEQUENT REPORT OF:

(Submit Original Form Only)

☐ ABANDON\* ☐ NEW CONSTRUCTION

☐ REPAIR CASING ☐ PULL OR ALTER CASING

☐ CHANGE OF PLANS ☐ RECOMPLETE

☐ CONVERT TO INJECTION ☐ REPERFORATE

☐ FRACTURE TREAT OR ACIDIZE ☐ VENT OR FLARE

☐ OTHER \_\_\_\_\_

## DATE WORK COMPLETED \_\_\_\_\_

Report results of Multiple Completion and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\*Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)

Newfield Production Company requests to extend the Permit to Drill this well for one more year.

13. NAME & SIGNATURE *Mandie Crozier* TITLE Regulatory Specialist DATE 8/27/2008

(This space for State use only)

4/94

\* See Instructions On Reverse Side

Approved by the  
Utah Division of  
Oil, Gas and MiningRECEIVED  
AUG 28 2008Date: 09-02-08  
By: *[Signature]*COPY SENT TO OPERATOR DIV. OF OIL, GAS & MINING  
Date: 9.3.2008  
Initials: KS



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38368  
**Well Name:** Horseshoe Bend State 11-36-6-21  
**Location:** NW/SW Section 36, T6S R21E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 9/21/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

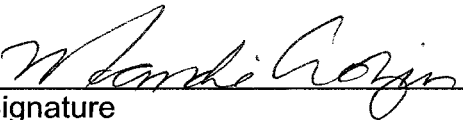
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

8/27/2008  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

|  |  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
|--|--|---|----------------------------------|---------------------------------------|--|---|--|---|---|---|--|---------------------------------|---|---|--|---|------------------------------------|---|---|---|--|---|--|--|--|---|--|---|---|---|--------------------------------|--------|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |  | <b>FORM 9</b>   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.   |  | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML-33225      |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>1. TYPE OF WELL</b><br>Gas Well   |  | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                    |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>2. NAME OF OPERATOR:</b><br>NEWFIELD PRODUCTION COMPANY   |  | <b>7. UNIT or CA AGREEMENT NAME:</b>                            |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>3. ADDRESS OF OPERATOR:</b><br>Rt 3 Box 3630 , Myton, UT, 84052   |  | <b>8. WELL NAME and NUMBER:</b><br>HORSESHOE BEND ST 11-36-6-21 |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>1584 FSL 1342 FWL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: NWSW Section: 36 Township: 06.0S Range: 21.0E Meridian: S  |  | <b>9. API NUMBER:</b><br>43047383680000                         |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>PHONE NUMBER:</b><br>435 646-4825 Ext   |  | <b>9. FIELD and POOL or WILDCAT:</b><br>HORSESHOE BEND          |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>COUNTY:</b><br>UINTAH   |  | <b>STATE:</b><br>UTAH   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>   |  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>TYPE OF SUBMISSION</b>  | <b>TYPE OF ACTION</b>  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>9/2/2009<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> ACIDIZE</td> <td><input type="checkbox"/> ALTER CASING</td> <td><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td><input type="checkbox"/> CHANGE TUBING</td> <td><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td><input type="checkbox"/> CHANGE WELL STATUS</td> <td><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td><input type="checkbox"/> DEEPEN</td> <td><input type="checkbox"/> FRACTURE TREAT</td> <td><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td><input type="checkbox"/> OPERATOR CHANGE</td> <td><input type="checkbox"/> PLUG AND ABANDON</td> <td><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td><input type="checkbox"/> TUBING REPAIR</td> <td><input type="checkbox"/> VENT OR FLARE</td> <td><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> WATER SHUTOFF</td> <td><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td><input checked="" type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td><input type="checkbox"/> OTHER</td> <td>OTHER:  </td> </tr> </table> |   | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input checked="" type="checkbox"/> APD EXTENSION | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: |
| <input type="checkbox"/> ACIDIZE   | <input type="checkbox"/> ALTER CASING  | <input type="checkbox"/> CASING REPAIR                          |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  | <input type="checkbox"/> CHANGE TUBING   | <input type="checkbox"/> CHANGE WELL NAME                       |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> CHANGE WELL STATUS  | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  | <input type="checkbox"/> CONVERT WELL TYPE                      |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> DEEPEN  | <input type="checkbox"/> FRACTURE TREAT  | <input type="checkbox"/> NEW CONSTRUCTION                       |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> OPERATOR CHANGE   | <input type="checkbox"/> PLUG AND ABANDON  | <input type="checkbox"/> PLUG BACK                              |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> PRODUCTION START OR RESUME  | <input type="checkbox"/> RECLAMATION OF WELL SITE  | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION         |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> REPERFORATE CURRENT FORMATION   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL  | <input type="checkbox"/> TEMPORARY ABANDON                      |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> TUBING REPAIR   | <input type="checkbox"/> VENT OR FLARE   | <input type="checkbox"/> WATER DISPOSAL                         |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> WATER SHUTOFF   | <input type="checkbox"/> SI TA STATUS EXTENSION  | <input checked="" type="checkbox"/> APD EXTENSION               |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <input type="checkbox"/> WILDCAT WELL DETERMINATION  | <input type="checkbox"/> OTHER   | OTHER:  |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b><br><br>Newfield requests to extend the Application to Drill this well for one year.  |  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>REQUEST DENIED</b><br><b>Utah Division of</b><br><b>Oil, Gas and Mining</b><br><br><b>Date:</b> <u>September 14, 2009</u><br><br><b>By:</b> _____   |  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>NAME (PLEASE PRINT)</b><br>Mandie Crozier   |  | <b>PHONE NUMBER</b><br>435 646-4825                             |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>SIGNATURE</b><br>N/A  |  | <b>TITLE</b><br>Regulatory Tech                                 |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |
| <b>DATE</b><br>9/14/2009   |  |   |                                  |                                       |  |   |  |   |   |   |  |                                 |   |   |  |   |                                    |   |   |   |  |   |  |  |  |   |  |   |   |   |                                |        |



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

### Request for Permit Extension Validation Well Number 43047383680000

**API:** 43047383680000

**Well Name:** HORSESHOE BEND ST 11-36-6-21

**Location:** 1584 FSL 1342 FWL QTR NWSW SEC 36 TWP 060S RNG 210E MER S

**Company Permit Issued to:** NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 9/21/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**REQUEST DENIED**

**Utah Division of  
Oil, Gas and Mining**

**Signature:** Mandie Crozier

**Date:** 9/14/2009

**Title:** Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY **Date:** September 14, 2009

**By:** \_\_\_\_\_

**RECEIVED** September 14, 2009



LA  
9/22/2010



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

September 22, 2009

Mandie Crozier  
Newfield Production Co  
Route 3 Box 3630  
Myton, UT 84052

Re: APD Rescinded – Horseshoe Bend St 11-36-6-21, Sec. 36 T.6S, R.21E  
Uintah County, Utah API No. 43-047-38368

Dear Ms. Crozier:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 21, 2006. On October 10, 2007 and September 2, 2008 the Division granted a one-year APD extension.

No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective September 22, 2009.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner

